

STAFFED BY THE UNIVERSITY OF TEXAS  
MARINE SCIENCE INSTITUTE  
PORT ARANSAS MARINE LABORATORY  
PORT ARANSAS, TEXAS 77652

# Texas Coastal Management Program

EXECUTIVE  
SUMMARY

HE  
393.5  
T4  
T482  
1976  
V.2  
c.2  
MSL

REWILES



Publications of the Texas Coastal Management Program:

*Existing Data: An Annotated Bibliography of Research Activities in the Coastal Zone*, August, 1974.

*Present Authority: Authority of Governmental Entities in the Texas Coastal Zone*, January, 1975.

*Public Participation: A Report of Public Participation, June to October, 1974*, January, 1975.

*The Coastal Economy: An Economic Report*, October, 1975.

*Resources of the Texas Coastal Region*, October, 1975.

*Texas Coastal Management Program* (hearing draft), June, 1976.

*Texas Coastal Management Program: Executive Summary* (hearing draft), June, 1976.

*Texas Coastal Management Program: Appendices* (hearing draft), June, 1976.

*Current Permitting Processes in State and Federal Natural Resource Agencies* (2 vols.), June, 1976.

*Public Hearing Transcripts* (10 vols.), September, 1976.

*Texas Coastal Management Program:*

*Report to the Governor and the 65th Legislature*, November, 1976.

*Texas Coastal Management Program:*

*Report to the Governor and the 65th Legislature—Executive Summary*, November, 1976.

*Texas Coastal Management Program:*

*Report to the Governor and the 65th Legislature—Appendices*, November, 1976.

Conducted by  
RPC, Inc.  
RON JONES, DIRECTOR

# **TEXAS COASTAL MANAGEMENT PROGRAM**

REPORT TO THE GOVERNOR AND THE 65TH LEGISLATURE

## **EXECUTIVE SUMMARY**

**General Land Office of Texas**

**Bob Armstrong, Commissioner**



**NOVEMBER 1976**

*This program is funded in part through financial assistance provided by the Coastal Zone Management Act of 1972, administered by the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration.*

## ADVISORY COMMITTEE

John B. Armstrong	Texas and Southwestern Cattle Raisers Association
Jay Barnes	Texas Society of Architects
David Blankinship	National Audubon Society
Ed Bluestein	Attorney, Houston
Robert Braden	Consulting Engineers of Texas
R. J. Christie	Harris County AFL-CIO
William H. Clark	Attorney, Dallas
Allen Cluck	Tenneco, Incorporated
Dr. James Coleman	City of Victoria
Steve Frishman	Coastal Bend Conservation Association
John Galley	The Nature Conservancy
Tom Garner	Golden Crescent Council of Governments
Ed Harte	Corpus Christi Caller-Times
Bobette Higgins	League of Women Voters of Texas
Ed Holder	Outdoor Writers Association
Bud Hopkins	Envirodynamics, Incorporated
Hon. Bert Huebner	Judge, Matagorda County
Pearce Johnson	Chairman, Parks & Wildlife Commission
Louis H. Jones	Brazosport Chamber of Commerce
Bill Kacy	Union Carbide Corporation
E. Ward McCown	Texas Farm Bureau
George McGonigle	Friendswood Development Corporation
John Mehos	Liberty Fish & Oyster Company
George Mitchell	Mitchell Energy & Development Corporation
Kenneth Montague	General Crude Oil Company
Bob Moore	Attorney, Houston
Jay Naman	Texas Farmers Union
Hon. O. F. Nelson, Jr.	Judge, Chambers County
Venable Proctor	Attorney, Victoria
Cecil Reid	Sportsmen's Clubs of Texas
John Rogers	Texas AFL-CIO
Royal Roussel	Retired
Leo Sanders	Port Isabel
Danny Sendejas	League of United Latin American Citizens
D. E. Simmons	Houston Lighting & Power Company
John Specht	Guadalupe-Blanco River Authority
Sharron Stewart	Texas Committee on Natural Resources
G. L. Suffredini	Reynolds Aluminum
Harvey Weil	Attorney, Corpus Christi
L. D. "Bubba" Whitehead	Rancher

The contents of this report have been reviewed by the Texas Coastal Management Program Advisory Committee, and the program staff has considered their comments. The report does not necessarily reflect their views, however, and the staff of the Coastal Management Program assumes all responsibility for its contents.





November 1, 1976

The Honorable Dolph Briscoe  
Governor of Texas  
Austin, Texas 78711

Dear Governor Briscoe:

In response to your request and designation, I began in June of 1974 to lead an effort on behalf of all the state's natural resource agencies to develop a coastal management program for Texas. This summary presents recommendations for an improved coastal management process. They appeared in draft form in June and were the subject of ten public hearings in August and September. Following these hearings, the recommendations were revised and amended, and they appear here in their final form for consideration by you and the 65th Texas Legislature.

In order to develop recommendations that were responsive to the needs of all the people of Texas, I appointed a 41-member advisory committee whose diverse viewpoints and experience represented virtually all the major interests along the Texas coast. I have consulted them frequently, and they have given generously of their time and effort to discuss and criticize our work. Considering the diversity of their perspectives on the Texas coast, I have been pleasantly surprised by how well they have worked together to discuss many difficult issues. I am also gratified that, despite their differences, they are nearly unanimous in supporting the recommendations presented in this document.

I believe that all the people of Texas will benefit from the recommendations and therefore look forward to their implementation.

Yours truly,

A handwritten signature in black ink that reads "Bob Armstrong". The signature is written in a cursive, flowing style.

Bob Armstrong, Commissioner  
GENERAL LAND OFFICE

## ACKNOWLEDGMENTS

At the request of Governor Briscoe, the General Land Office of Texas has led the state's efforts to develop an improved coastal management process. Under contract to the General Land Office, RPC, Inc., of Austin, Texas, has provided the following professional staff for the program:

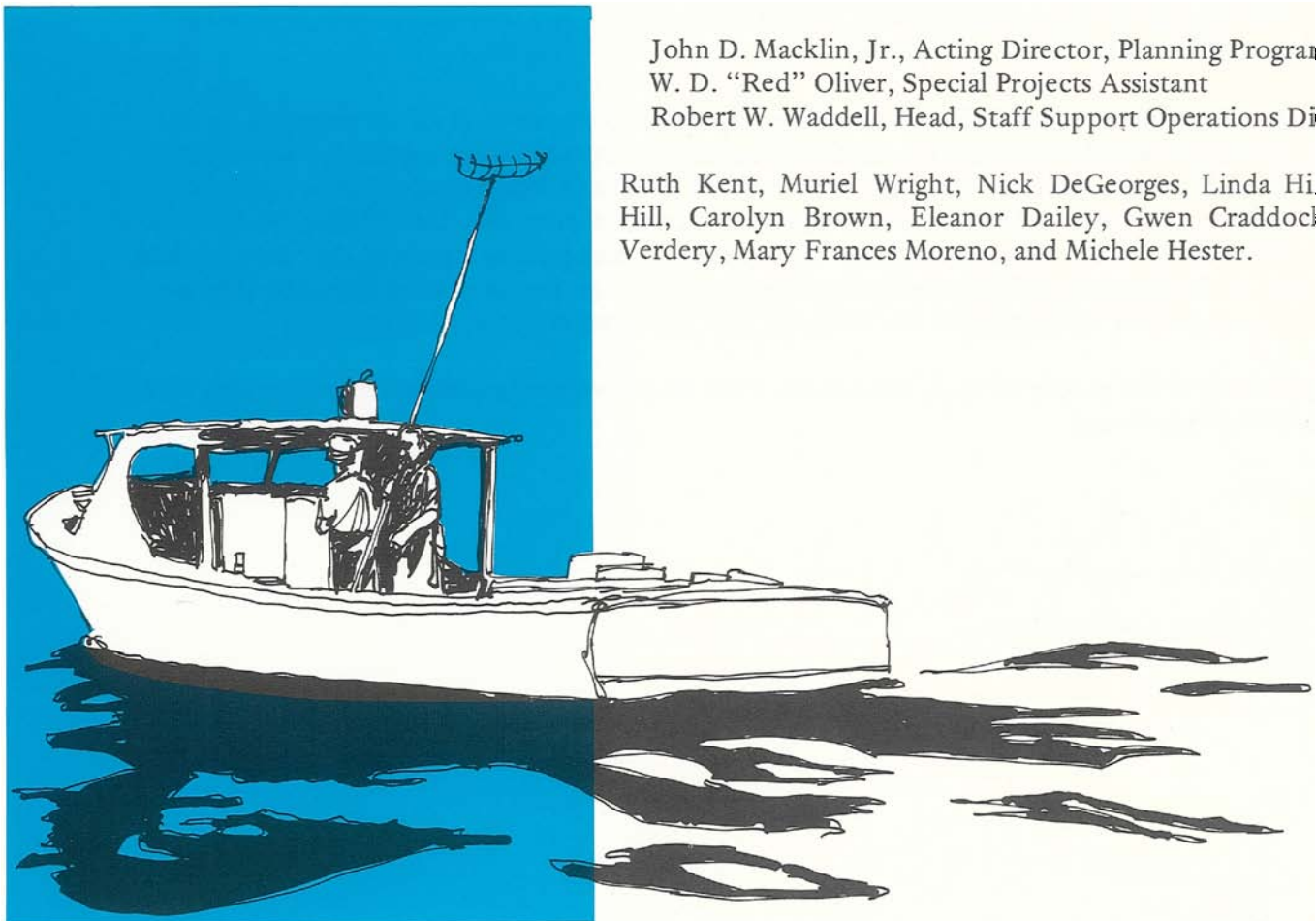
Ron Jones, Director  
Jep Hill, Assistant Director  
Charles M. Woodruff, Jr., Head, Resource Capability Division  
David E. Brown, Head, Institutional and Legal Division  
Gary Catron, Head, Public Participation Division

William L. Longley, Andrew E. Reed, Stephen Minick, Charlie Nims, Christine Gever, Molly M. Moore, James C. Morriss III, Polly A. McGlew, Arthur L. Eatman, Sally A. Mitchell, Sharon Howard, and Pat Wiles.

Assisting in the program from the General Land Office staff were:

John D. Macklin, Jr., Acting Director, Planning Program  
W. D. "Red" Oliver, Special Projects Assistant  
Robert W. Waddell, Head, Staff Support Operations Division

Ruth Kent, Muriel Wright, Nick DeGeorges, Linda Hil, Lou Hill, Carolyn Brown, Eleanor Dailey, Gwen Craddock, Lyn Verdery, Mary Frances Moreno, and Michele Hester.



## TABLE OF CONTENTS

PREFACE .....	1
---------------	---

### CHAPTER I – THE IMPORTANCE OF THE TEXAS GULF COAST

Overview .....	4
Economic Productivity .....	4
Livability .....	6
Natural Resources .....	6
Role of Government .....	10
Summary .....	11

### CHAPTER II – CURRENT COASTAL MANAGEMENT AUTHORITY

Overview .....	13
The Market System .....	13
State Coastal Management—	
Background and Authority .....	14
Legislative and Executive Roles .....	14
Informal State Management Priorities .....	15
Coordination of Agency Activities .....	16
Summary .....	19

### CHAPTER III – THE PROBLEMS

Overview .....	21
Policy Planning and Coordination .....	22
Information and Research Management .....	22
Systematic Activity Assessment .....	23
Natural Hazards .....	23
Bay and Estuarine Management .....	23

### CHAPTER IV – A PROPOSAL FOR IMPROVED COASTAL MANAGEMENT

Overview .....	24
Establishment of the NRC .....	27
Proposed Changes in Information Management .....	29
Proposed Activity-Assessment Routine .....	30
Proposed Management Boundary .....	30
Proposed Review of Hazard Responses .....	31
Coastal Waters and Submerged Lands .....	31
Bay and Estuarine Productivity .....	32
Federal Coordination .....	33
Summary of Recommendations .....	34



## CHAPTER V — ADVANTAGES OF THE PROPOSED MANAGEMENT PROGRAM

Overview .....	36
Preservation of State Control of Coastal Policy .....	36
Increased Accountability of State Agencies .....	39
Increased Efficiency in State Coastal Programs .....	41
Practicality .....	43
Potential Disadvantages and Costs .....	43
Creation of the NRC and Establishment of the Activity-Assessment Routine .....	44
Costs for Transfer of Wetlands Permitting Procedures .....	44
Possibilities of Federal Funding .....	45
Costs of Change .....	45
Control of Cost by Existing Agencies .....	47
Summary .....	47

## LIST OF ILLUSTRATIONS

### Figures

1 Economic Sectors that Directly “Bid” for Goods from Coastal Waters .....	7
2 Nonmarket Values of Coastal Waters .....	7
3 Composite Resource Areas of Coastal Waters and Shorelands .....	9
4 Responsibilities of Various State Agencies .....	16
5 Examples of Coastal Areas Regulated by State Agencies .....	17
Map Plates 1-7—The Coastal Boundary .....	48-54

## PREFACE

The State of Texas has long been concerned with such coastal matters as storm protection, waterway development, recreational facilities development, fisheries management, and beach protection. In 1969, the state began a four-year study of its coastal resources. As a result of this study, legislation affecting management of the coastal public lands and various other coastal topics was enacted. This study also led to the recommendation that the state seek funds under the federal Coastal Zone Management Act of 1972 to develop a coastal management process to coordinate the state's many coastal activities and policies.

Following this recommendation, the governor designated the Commissioner of the General Land Office, Bob Armstrong, to lead the state's efforts in this task and to apply for partial federal funding of those efforts. Federal matching funds were received in June, 1974, and the Texas Coastal Management Program was initiated as a joint undertaking of the state's natural resource agencies.

The objectives of the Coastal Management Program are, through interagency cooperation and extensive public participation, to develop and recommend to the governor and legislature

1. an improved and flexible policymaking process which will ensure a continuing balance among future economic, environmental, and social needs along the coast, and
2. the steps for implementing such a process.

This document summarizes the recommendations developed by this program. Public hearings on these recommendations were held according to the following schedule:

Monday, August 9	Brownsville Fort Brown Hotel
Wednesday, August 11	Corpus Christi Emerald Beach Holiday Inn
Friday, August 13	Victoria Victoria Bank & Trust Building
Monday, August 16	Bay City Service Center
Wednesday, August 18	Houston Marriott Motor Hotel
Friday, August 20	Galveston County Courthouse
Monday, August 23	Beaumont Red Carpet Inn
Wednesday, August 25	Dallas Marriott Motor Hotel Stemmons Freeway

Monday, August 30 ..... San Antonio  
El Tropicano Hotel  
Wednesday, September 1 ..... Austin  
Stephen F. Austin  
State Office Building

Public commentary received at these hearings, through the program advisory committee, and through letters to the program staff was reviewed and taken into consideration in preparing these final recommendations for submission to the governor and to the legislature.





Copies of this summary, the program's main report, and the hearing transcripts have been placed in the State Library in Austin and in public libraries throughout the coast. While supplies last, copies of these and other Coastal Management Program documents are available free of charge from:

Texas Coastal Management Program  
General Land Office  
1700 North Congress Avenue  
Austin, Texas 78701  
(512) 475-6902





## Overview

The Texas Gulf Coast commands the state's attention for four reasons. First, the economic productivity of the coastal area holds statewide and national importance, and it continues to grow. Second, the coastal area offers an attractive mix of social, economic, and natural amenities; it is very "livable." Third, the natural resource base of the coast is vital to its productivity and livability. To assure the continued productivity and livability of the coast in the face of its increased use and intensive development, the complex interactions of its natural resource systems must be better understood and managed. Fourth, the state must play a role in coastal management because a large part of the coastal resource base is publicly owned and still more of it is subject to established regulatory and public investment programs.

The importance of the coast, for both today and the foreseeable future, is evident in the fact that the coast concentrates a third of the state's population and a third of its economic activity into a tenth of the state's land area. It has grown rapidly, and most indicators point to continued growth. Developmental pressures will be greatest in urban areas with port facilities, but increasing demands for recreational areas, port and waterway development, industrial sites, mineral production, freshwater supplies, second homes, and environmental amenities will be felt throughout the coast.

## Economic Productivity

Historically, the vast and highly productive natural resources of the Texas Gulf Coast have made it a major contributor to the prosperity and well-being of the state and the nation. For example, 40 percent of the nation's petrochemical industry and 25 percent of the nation's refining capacity are located on the Texas coast, three Texas ports are among the 10 largest in the nation, and the state's 2,500 miles of shoreline are a great attraction to over 10 million visitors who come to the state annually.

The three economic sectors depending directly upon coastal waters—waterborne transportation, commercial fishing, and most of the recreation and tourism in the coastal region—compete with each other for the use of the coastal resources. Port facilities and dredged channels that may interfere with continued biologic productivity in some parts of the coastal waters can have adverse effects on sport and commercial fishing. Likewise, aesthetic considerations that benefit recreation and tourism sometimes conflict with the intensive uses of coastal waters for ports and waterways. Other economic sectors, too, make competing demands for fresh water and for space either directly or indirectly (fig. 1). These sectors include petroleum



CHAPTER I

# THE IMPORTANCE OF THE TEXAS GULF COAST





producers and refiners, petrochemical and metals manufacturers, agriculture, and housing. The water demands of these sectors and of the municipalities of the state may reduce the inflows of freshwater, sediment, and nutrients to coastal ecosystems. Likewise, the waterways needed to sustain the Texas economy require extensive dredging. Wetlands and other areas necessary for the continued biologic productivity of the state's bays may be damaged by changed freshwater, nutrient, or sediment inflows or by the disposal of dredged materials.

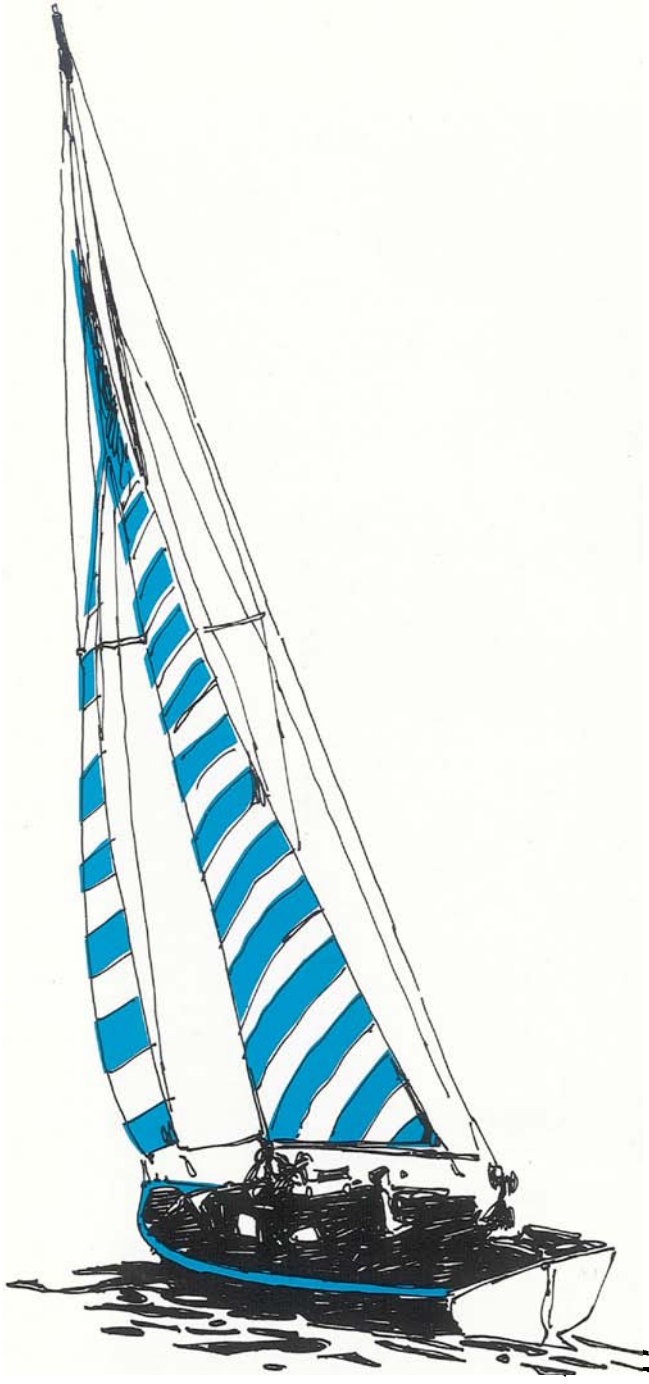
### Livability

Direct economic activities, however, are not the only measure of coastal productivity; the "livability" of the coast must be considered. "Livability" is defined by the qualities that make an area a good place to live. A "livable" place offers more than satisfaction of the necessities; it offers a balance between continuing economic opportunities and other attractive qualities. On the coast, these qualities include a mixture of natural resources, not all of which are adequately taken into account by the marketplace (fig. 2): an adequate freshwater supply, including unpolluted surface water and groundwater producible without adverse effects, a pleasant climate, clean fresh air, open spaces, beaches, and fishing and hunting opportunities. Other components of livability are the availability of jobs, public safety, public facilities, and freedom from unnecessary governmental restrictions on the use of resources. Retaining all these components requires a balance between development and preservation. People demand a mixture of elements for a high quality of life, but they assign different priorities to these elements.

Just as the various economic sectors compete for resources, some of the components of livability conflict with one another. For example, jobs often depend on intensive economic activities that conflict with aesthetics or other social values. Freedom from governmental control may not be consistent with a desire for facilities or services funded with tax dollars.

### Natural Resources

The livability and abundant economic productivity of the coast make it important, but why should there be concern about it? The answer is that the natural resource base which makes possible the livability and the economic activities of the coast is being changed by these very activities. When a river is dammed for flood control or water supply, freshwater, nutrient, and sediment inflows to the bays may be curtailed. When a channel is dredged, bay circulation patterns are changed by both the channel and its spoil area. When a marsh is partly filled for a recreational or second-home development, marsh productivity is diminished. The complexity and interdependence of both the human and natural systems along the coast mean that activities using coastal resources may have unseen but important repercussions. To assure a lasting and desirable mix of benefits



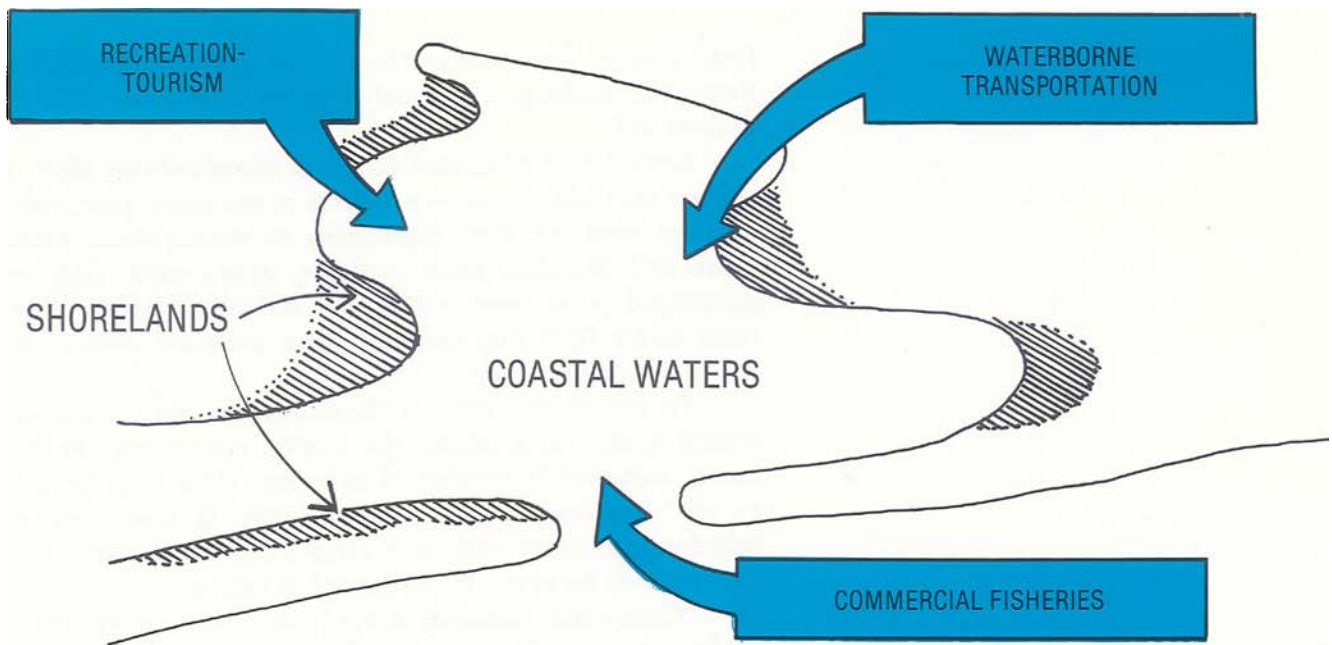


Figure 1  
ECONOMIC SECTORS THAT DIRECTLY "BID"  
FOR GOODS FROM COASTAL WATERS

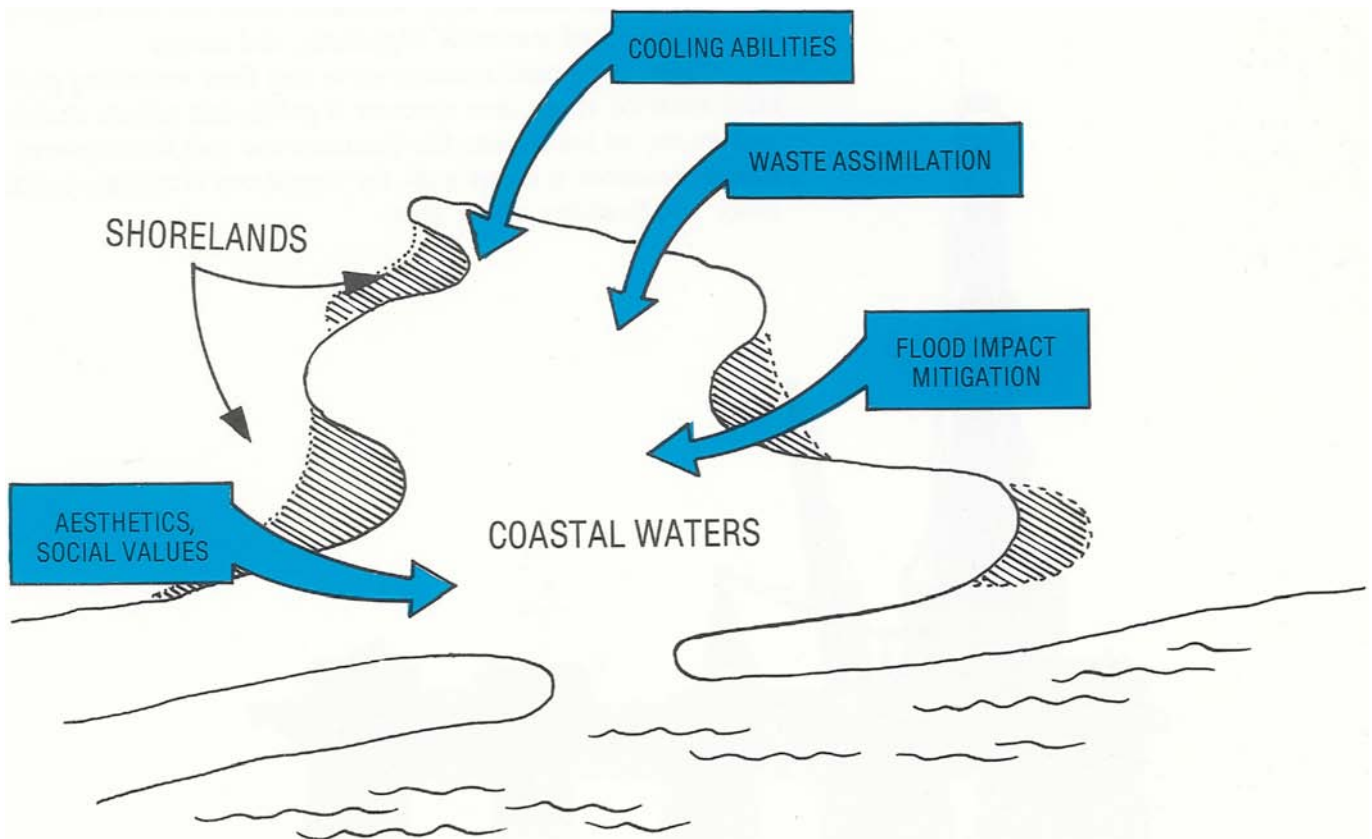


Figure 2  
NONMARKET VALUES OF COASTAL WATERS

from coastal resources in the face of growing demands upon them, the workings of coastal resource systems must be better understood.

Not all areas of coastal waters or shorelands are alike. They do not all yield the same products in the same quantities, nor do they need the same ingredients to sustain them. Although beach and shoreface areas, marshes, oyster reefs, tidal passes, submerged grass areas, tidal flats, and other resources of the coast differ from one another, these areas are interconnected and affect one another.

To understand each of these areas in the context of the coastal system as a whole, the coastal system may be broken into a manageable number of subunits. These may be referred to as "composite resource areas" (fig. 3) since they group together into functional units various physical features and life forms which are typically associated in nature.

"Composite resource areas," whether natural or man-made, are mappable entities defined by local characteristics of processes, substrate, landforms, soils, biota, and other factors that naturally support certain levels of human activities without appreciable environmental harm or human hazard. Each composite resource area can be described in terms of its "sustaining parameters"—that is, specific energy and material inputs, products, and characteristic features which, in combination, make that area a functional unit. Resource areas are interconnected by movements of materials, organisms, and energy.

These composite resource areas and their sustaining parameters must be taken into account if public and private decision-makers are to harmonize the intensive use and development of coastal resource systems with the continued economic productivity and livability of the area.

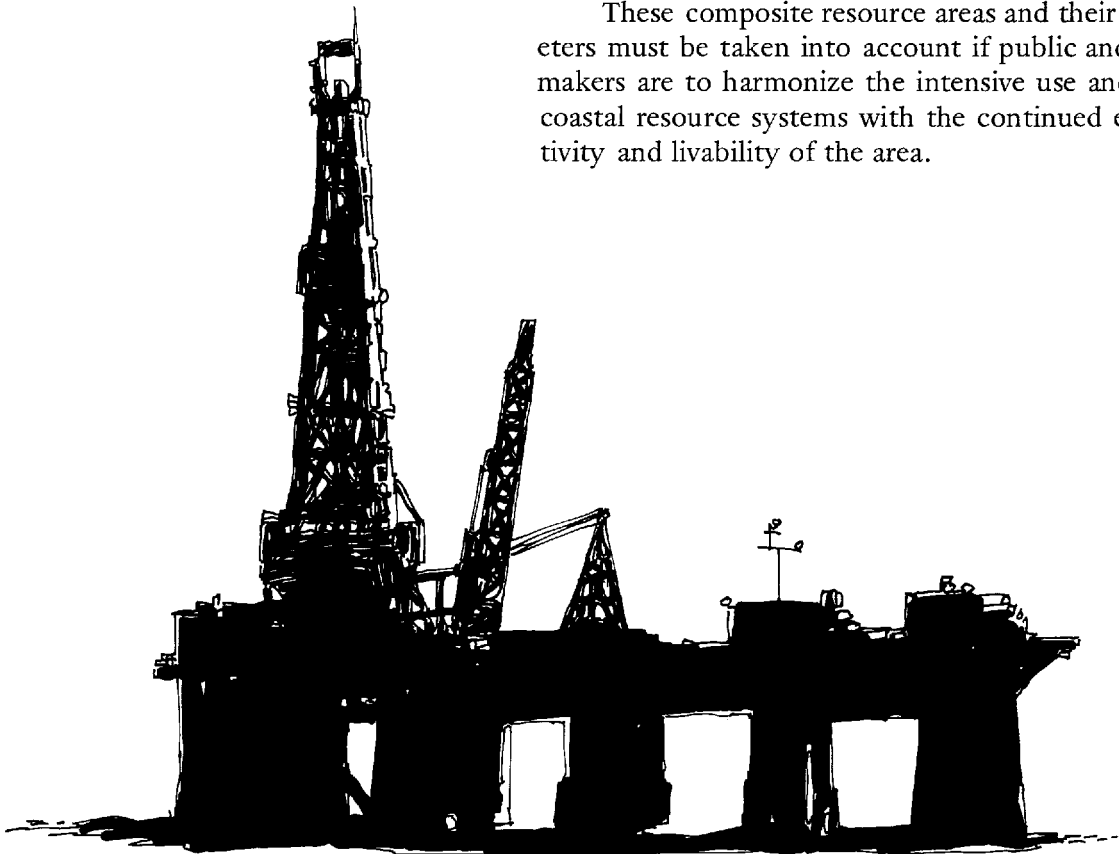
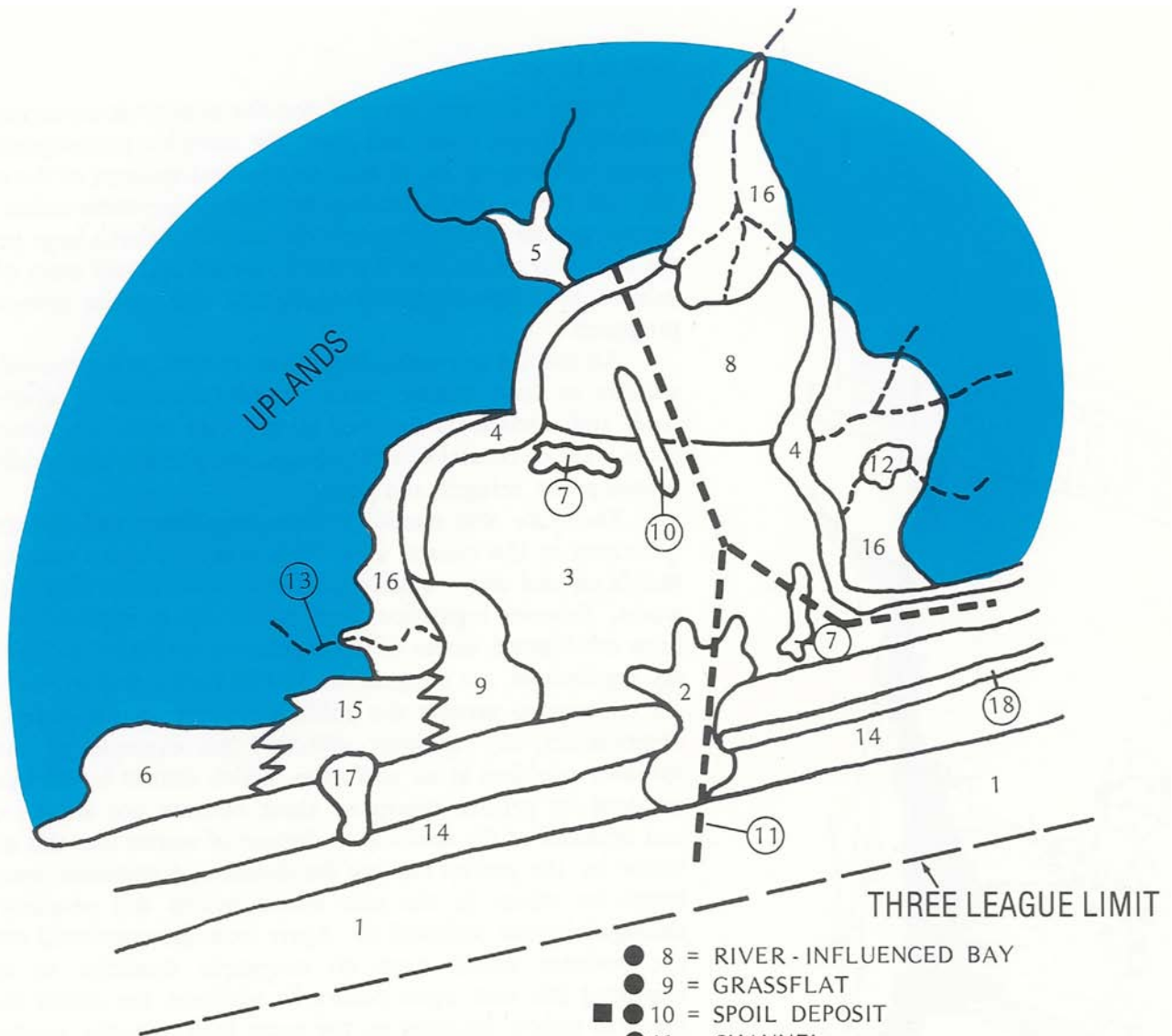




Figure 3  
COMPOSITE RESOURCE AREAS OF  
COASTAL WATERS AND SHORELANDS



- 1 = NEARSHORE GULF
- 2 = INLET/TIDAL DELTA
- 3 = MEDIUM - SALINITY BAY
- 4 = BAY TRANSITIONAL AREA
- 5 = RESTRICTED BAY
- 6 = HYPERSALINE BAY/LAGOON
- 7 = REEF AND REEF-FLANK AREA
- 8 = RIVER - INFLUENCED BAY
- 9 = GRASSFLAT
- 10 = SPOIL DEPOSIT
- 11 = CHANNEL
- 12 = COASTAL LAKE
- 13 = TIDAL STREAM
- 14 = BEACH/UPPER SHOREFACE
- 15 = WIND - TIDAL FLAT
- 16 = TIDAL MARSH
- 17 = WASHOVER COMPLEX
- 18 = ACTIVE DUNE COMPLEX

● COASTAL WATERS ■ SHORELANDS

■● COMBINATION COASTAL WATERS AND SHORELANDS

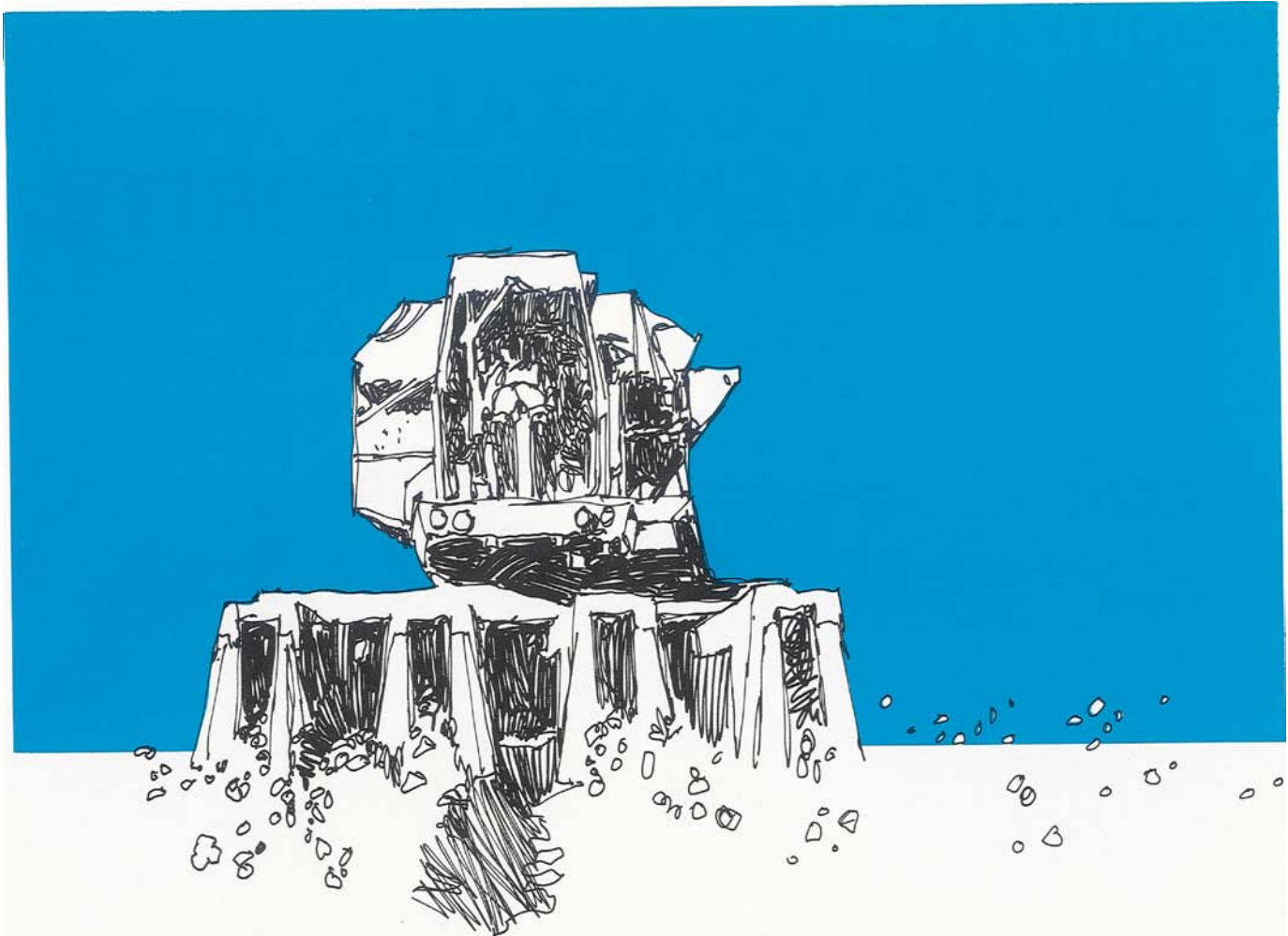


### Role of Government

Given the rising demand for the economic resources and livability of the coast, and given the complex interdependence within and among the human and natural systems of the coast, why are these coastal issues governmental concerns rather than merely private sector matters? The answer is that a large part of the coastal resource base is publicly owned and still more of it is subject to long-established regulatory and public investment programs.

All coastal salt water is publicly owned, as are the fish and wildlife in these waters. Nearly 4,000,000 acres of submerged lands and tidelands are owned by the state, and many thousand more acres of coastal waters, islands, and peninsulas are publicly owned parks, refuges, and ports.

The state also conducts many regulatory and investment functions in the coastal area. Regulatory activities such as the state's air and water quality programs, solid waste disposal programs, fisheries regulation, and public safety regulations have been established. Some of the regulatory activities, such as fishery regulations, are designed to protect public resources. Others are enacted to protect the public's interest against undesirable externalities, or "spillover effects." An example of such a spillover problem is air pollution, which cannot be adequately resolved by private enterprise alone because not all the costs and benefits of the decision to dispose of wastes into the air are borne by the parties making the decision. Significant costs are borne by others in the area whose health and property are damaged by the polluted air. Apart from governmental action, the polluter would have no economic incentive to avoid imposing this cost upon others. In addition, the public investment in public facilities on the coast such as parks, roadways, and waterways is large, and the state's disaster relief and preparedness activities for the coast are also important. Finally, promotional programs for industry, tourism, and marine resources are also conducted by the state. Clearly, the state is a major investor in the Texas Gulf Coast and an important source of the developmental pressure upon the coast. Therefore, the state should organize and conduct its activities on the coast effectively, efficiently, and with a view to its continued productivity and livability.



### Summary

The coast is a focus for concern because the increasing use and demand for coastal resources raises doubts that the economic productivity and livability supported by coastal resources will be maintained. Coastal resources, economic productivity, and livability are interdependent. Economic activities use natural resources, and natural resources provide the "raw materials" for a livable environment. Economic activities also produce jobs and dollar flows that increase livability and provide tax revenues. Livability, in turn, is determined by intangible values of resources, both natural and social. These matters fall within the scope of state governmental concern because of the state's long-established role as a major owner and regulator of coastal resources, and as an investor in public facilities such as waterways and parks.



# CHAPTER II

# **CURRENT COASTAL MANAGEMENT AUTHORITY**







## Overview

Although most management decisions affecting the coastal area are made by private interests operating in a market economy, they are made within the framework of local, state, and federal regulation. The role of state government has three basic facets:

1. The state owns and manages extensive coastal public resources.
2. State government currently exercises extensive regulatory authority over many privately owned coastal resources and exercises further regulatory authority in the interest of public safety.
3. The state is a major investor in a variety of coastal facilities.

Because the Coastal Management Program has observed considerable interest among the public in the state's role in managing coastal resources, and because both the state and federal governments want the state to play a proper and effective role in coastal matters of greater than local concern, this chapter examines the role of state government in coastal management.

## The Market System

The private sector—from the individual citizen who shops in the grocery store to the giant, multinational corporations—makes most of the decisions that affect coastal resource uses. Such decisions as what use will be made of a particular tract of land, what product a plant will manufacture, or what crops will be planted are made by private decision-makers in response to market forces.

When public problems arise from private decisions concerning coastal resources, government necessarily intervenes in the market system. Only a small portion of all coastal decisions, however, cause such problems.

Government also intervenes by providing public works and services—roads, schools, dams, ports, and police and fire protection—which the private sector cannot economically furnish to all segments of the public. Finally, state government manages publicly owned resources such as lands, waters, and fish.

## State Coastal Management— Background and Authority

Almost 100 years of management efforts have demonstrated the state's concern for ensuring Texans continual benefits from coastal waters. These efforts have included the passage of legislation to protect and develop coastal resources in the public's best interests.

Historically, the legislature has taken a problem-specific approach to coastal management, passing laws to resolve particular problems as they have arisen. This practice continues, and few successful efforts have been made to approach resource management on a comprehensive basis.

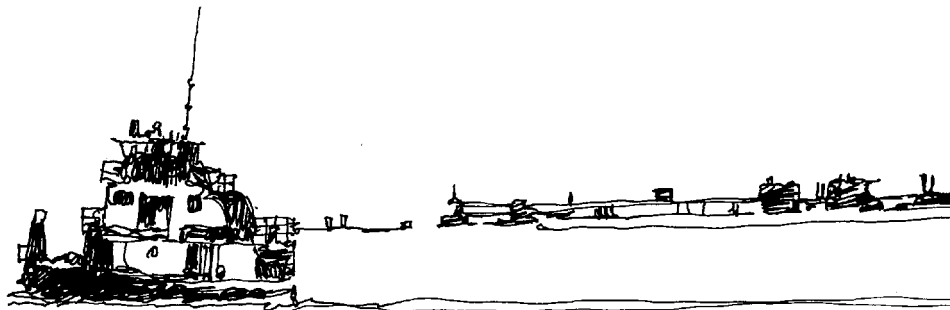
### Legislative and Executive Roles

The state constitution and laws have created an executive branch primarily composed of a few statewide elected officials and many part-time citizen commissions or boards whose members are appointed by the governor. The staff of each agency answers to the agency's executive director or elected head. Ultimately, each agency headed by a board or commission answers to the governor through its board or commission members, but all agencies must also indirectly answer to the legislature for their programs and budgets.

To serve effectively, the legislature, in turn, must regularly assess the state's need for new policies, strategies, and programs; it must measure performance against prior policies and strategies; and it must allocate state agency roles and appropriate state agency funding on the basis of performance. Without this process, which ties funding decisions to policies, strategies, and programs, no coastal policy or program—regardless of how comprehensive or sophisticated or well-balanced—can be meaningful. It is a fact too often overlooked that the budget is the state's real operating plan.

Only after the legislature has provided funds can state boards and commissions develop programs to implement legislative policies. This system of government has firm public support and many advantages:

- The executive branch agencies do not develop centralized power, because Texas does not have appointed administrator-bureaucrats. Instead, its agencies are headed by statewide elected leaders or citizen commissions or boards.





- Citizen input is increased through the public board members and commissioners.
- The legislature influences the executive branch by its domination of the budget process.
- Agencies pursuing competing legislative mandates and answering to independent boards or commissions can identify and pursue significant public issues with more vigorous and open advocacy than can agencies in a cabinet-style executive, where threats of dismissal can silence dissenting or inconvenient views.

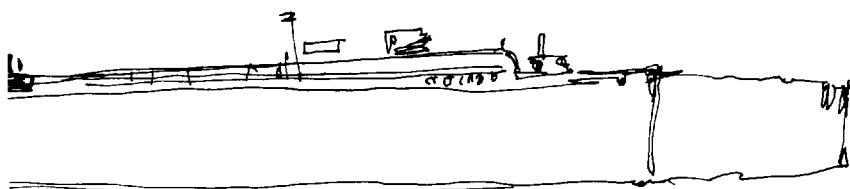
This system also has disadvantages:

- A constitutionally weak executive may mean a lack of unified direction for state government.
- Agencies may function independently, which risks conflicting policies, expensive duplication of effort, and unintended gaps in programs.
- Agency autonomy and the lack of effective interagency coordination may make it difficult for a person from the private sector to find his way through the maze of state government. Agencies may give different answers to the same question, and it is difficult to resolve such conflicts.

Although resource management functions in Texas are shared by more than a dozen independent agencies (fig. 4), the state now has virtually all the authority required to manage coastal resources. Figure 5 lists the agencies exercising primary and secondary responsibility over 19 typical coastal activities. This authority is considered sufficient to manage the coast.

### Informal State Management Priorities

As the agencies develop programs to implement their statutory responsibilities, they often find their concerns focused in particular geographical areas of the coast. These areas have special significance for the agency because of the agency's regulatory, developmental, or research efforts. Unfortunately, these areas are often only informally designated and the public is not generally aware of them. A permit sought for an activity in such an area may be opposed, modified, or denied by an agency without prior notice of the agency's concern for the area. These geographic "areas of particular concern" are cited here as examples of the little-known agency policy concerns that influence coastal management decisions.



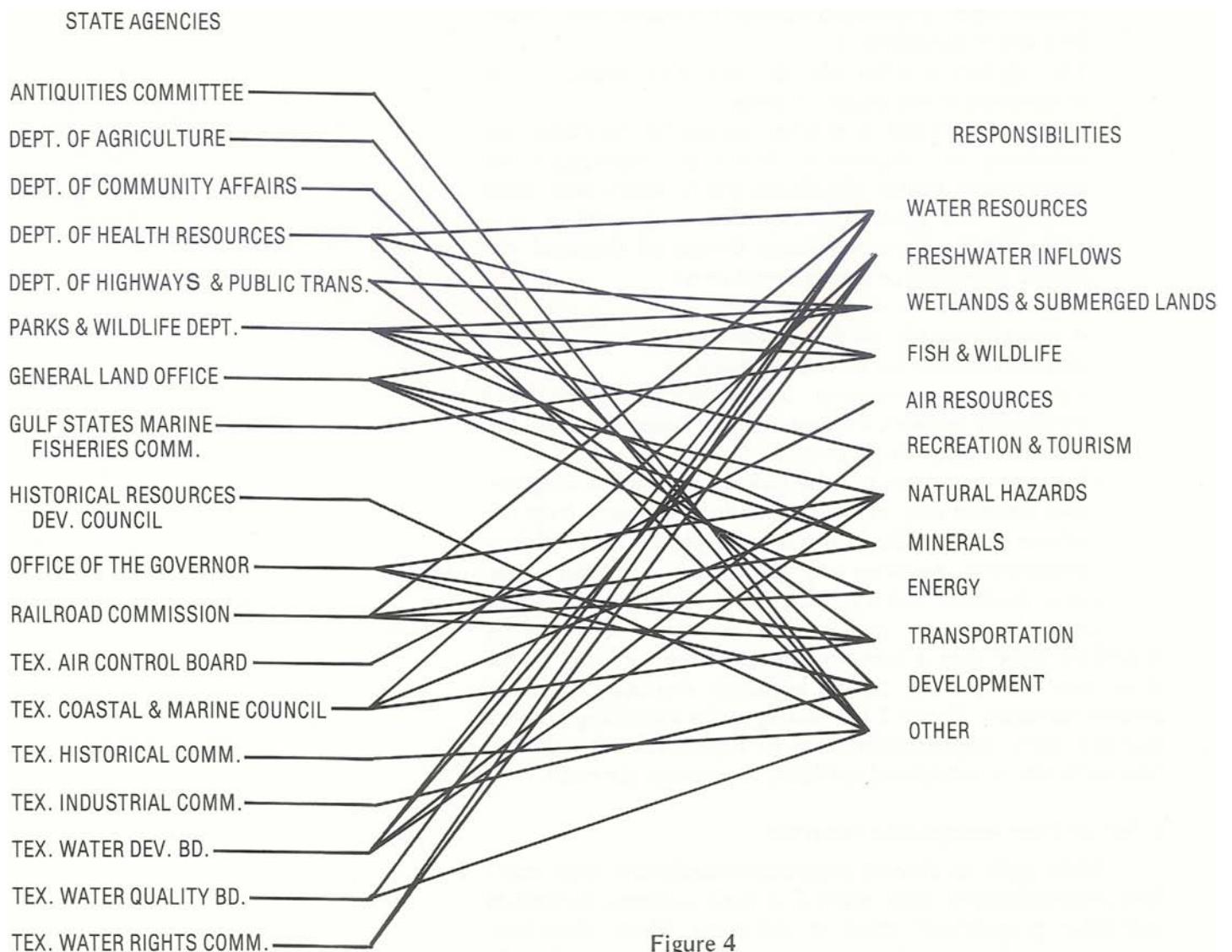


Figure 4

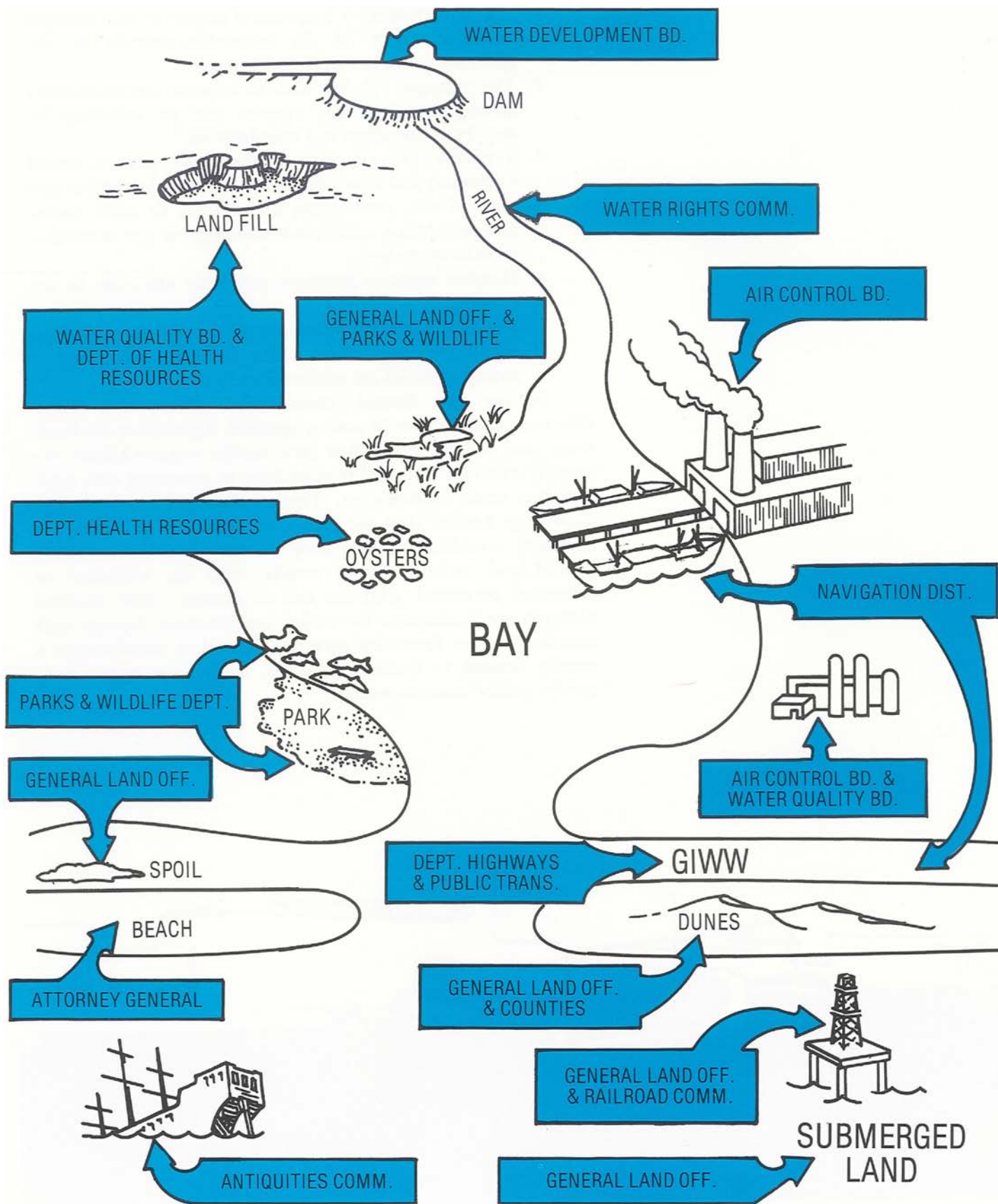
## RESPONSIBILITIES OF VARIOUS STATE AGENCIES

### Coordination of Agency Activities

The principal entity for the coordination of state agency coastal activities is the Interagency Council on Natural Resources and the Environment (ICNRE). Composed of the executive directors and elected heads of the state agencies responsible for management of natural resources, the council is chaired by a representative of the governor. The ICNRE was established by an executive order of the governor under the authority of a 1967 statute that created the Governor's Division of Planning Coordination (now the Governor's Budget and Planning Office) and authorized the governor to create interagency councils to coordinate state planning activities. The effectiveness of the ICNRE can be debated, but the following general statements can be made about council operations:

Figure 5

EXAMPLES OF COASTAL AREAS  
REGULATED BY STATE AGENCIES

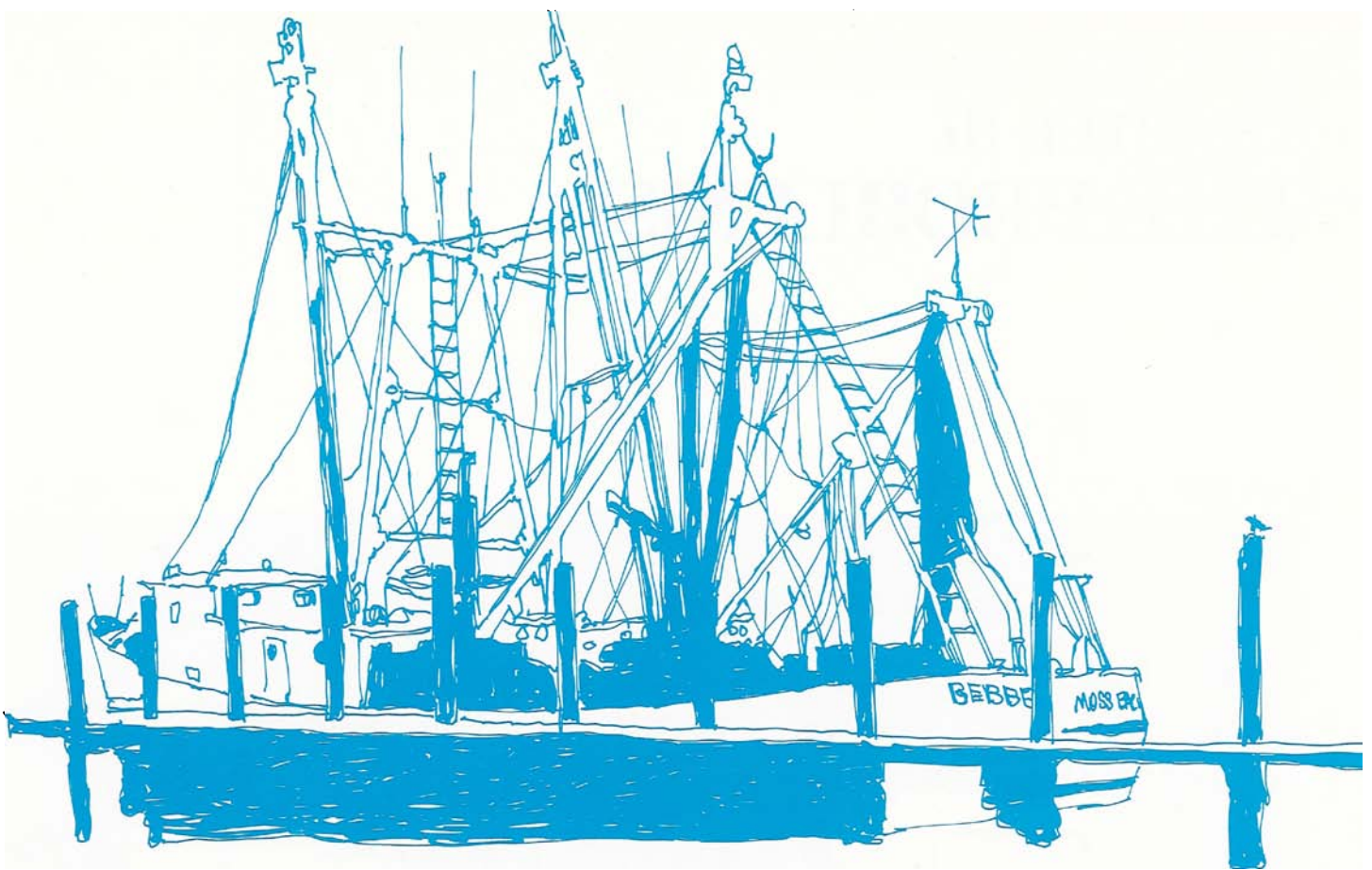


1. The effectiveness is determined largely by the strength and persistence of the leadership exerted by the governor or his designated chairman.
2. The principal role has been to improve communication among agencies. The council has no authority to require cooperation and coordination.
3. Typically, the council's meetings are spent in broad discussion and condemnation of federal intrusions into state affairs, establishing committees to study issues, and scheduling subsequent meetings of the council or its subcommittees.
4. Member agencies generally pay little attention to the council.
5. Few executive directors attend council meetings and significant program or policy differences between or among agencies are seldom discussed.

Besides the formal coordination mechanism, many informal procedures exist among agencies. Agencies at the local, state, and federal levels that have similar responsibilities frequently establish informal relationships as personnel who work together trade information. These informal procedures frequently go further than the formal procedures in providing the necessary coordination, but they do not always exist where needed and depend almost totally upon the initiatives of individual personnel, who can and do change. These informal channels are inadequate for policy coordination. Agency staff members cannot formulate agency policy; thus, coordination is usually limited to technical matters, leaving the major inter-agency policy issues unresolved.







## Summary

Coastal management has been a concern in Texas for a century. Most management decisions are now and will continue to be made by the market system. The coastal resources of this state are managed partially by a variety of local, state, and federal governments acting as regulators, owners, or investors. Acting through a number of agencies, most of which operate under appointive boards or commissions, the state has the necessary authority to regulate coastal resources with the exception of some wetlands. Coastal management in Texas does not lack policy, programs, and personnel; but it does need better linkages between legislative policy and budgeting decisions so that better policy-level coordination among its many agencies can be assured. This form of government offers advantages which Texans have traditionally believed very important; however, these advantages need not be purchased at the price of poor coordination.

# CHAPTER III

## THE PROBLEMS







### Overview

Growth and development along the Texas Gulf Coast are both desirable and necessary. There are problems, however, with the way the state performs its three-part role as coastal owner-regulator-investor, and these problems may prevent realization of the full potential of the coast. The state's present network of coastal agencies, programs, and priorities has been built up in a piecemeal fashion, new parts addressing narrowly defined problems without regard to the whole of the coastal economic, environmental, and social systems. As a result, the state's priorities can be easily confused or forgotten, management efforts by one agency may be frustrated by programs of another, and important state needs can be overlooked. These management problems cost the taxpayers money and short-change the public interest.

The problems are as follow:

1. State policy planning and coordination are inadequate to ensure effective and economical government.
2. The state's data management and research coordination practices do not adequately serve management needs.
3. Present state decision-making processes are not sufficiently responsive to the complex interactions among the natural and economic systems of the coast.
4. Further data and information programs are needed in response to coastal hazards.
5. New policies and programs are needed to assure balanced management of the state's bay and estuarine systems.



## Policy Planning and Coordination

The responsibility for coastal management functions and for other activities that affect coastal resources is divided among a great many agencies, each with a separate mission and each of which typically answers only to its own separate board or commission. These boards and commissions are only indirectly accountable to the governor and, under present arrangements, are substantially beyond legislative scrutiny. Given limited accountability, considerable agency autonomy is to be expected, and interagency coordination at the level of budgetary policy planning occurs only to the extent that it is mutually advantageous to the agencies involved. Efforts to solve this problem through the present interagency coordinating mechanism, the ICNRE, have failed because policymakers have not been placed on the ICNRE and because the participants do not have a sufficient incentive to coordinate their policies and activities. Some technique, short of creating a superagency, must be found to assure that state agencies are held accountable for coordinating their plans and programs affecting the coast.

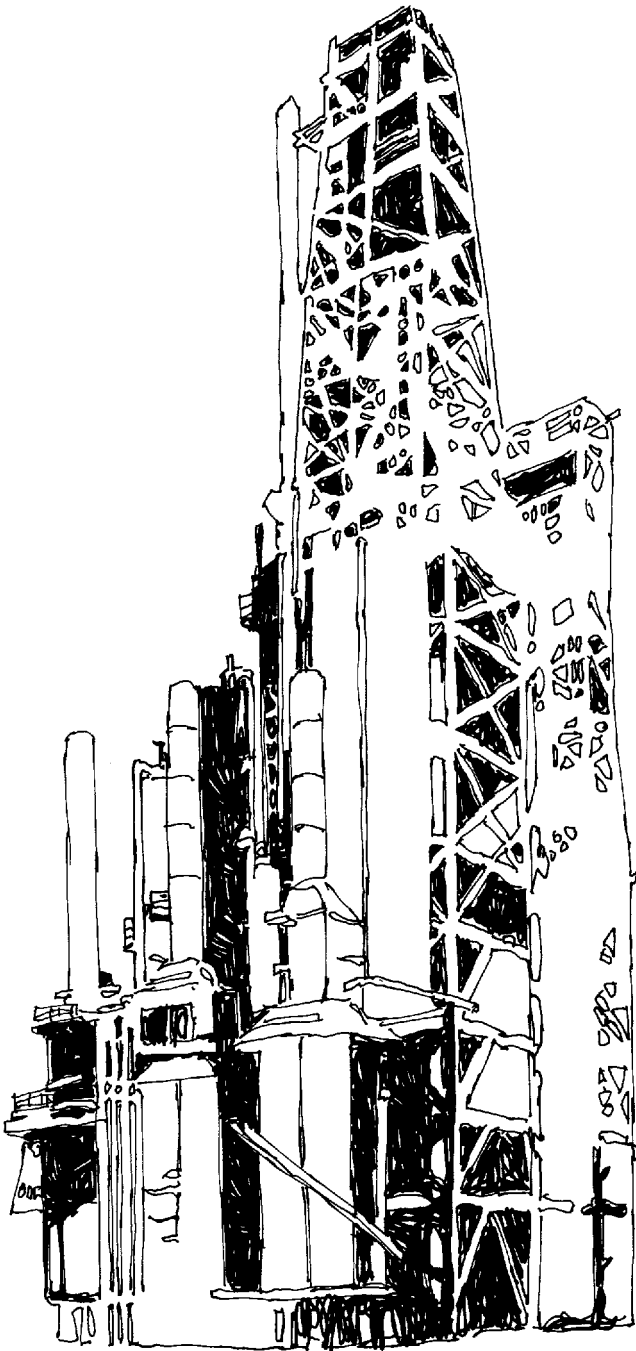
## Information and Research Management

Intelligent management of complex natural systems requires reliable, well-organized information which is systematically gathered in response to the state's most important management concerns. However, state decision-making is often frustrated by one or more data management problems. In some cases, important coastal information has not been developed, while in other cases the same information has been gathered time and again. In some instances research has been conducted but never made available to those who would need or use it; in others, the results of needed research are not useful because the data have not been developed or presented properly. Present procedures offer no assurance that the state's priority needs for research and data will guide the spending of the state's research dollars. On the other hand, research institutions seeking to build their efforts around the state's highest priority data needs may find it difficult to discover what those priority data needs are.

Attempting to manage complex coastal resources without an adequate information system assures that the public will pay at least twice—once when tax dollars are misspent for invalid, duplicative, or unnecessary research, and again when faulty decision-making improperly delays or permits a coastal activity.

The basic cause of data management problems is that data-collection efforts are fragmented. Commonly, data are collected by agencies and institutions that are separated from managers and regulators, and there are often no formal lines of communication among the various entities.

Data are often collected simply because the money is available. There is a definite need for pure research, but some publicly funded research should be directed at public problems.



These problems must be clearly defined, and the state's budgetary review process should measure research proposals and performance against the state's needs.

### Systematic Activity Assessment

Prudent and effective decisions affecting complex coastal natural, economic, and social systems require not only data, but careful and systematic use of those data in assessing the consequences of activities. Virtually every important coastal activity requires one or more state permits, and decisions are made every day on activities which have significant consequences for the coast. Yet, in many instances there are no systematic procedures to evaluate the chain of consequences a given act may impose upon the coast. Thus, it is likely that many unimportant questions will be asked of a permit applicant and that many important ones will not be asked. This injects unnecessary risks of delay and arbitrariness into the state's decision processes. A systematic procedure is needed which will bring all relevant data to bear on these decisions and which will identify the criteria on which judgments must be founded. Such a procedure would also aid the state in identifying and ranking its data needs.

### Natural Hazards

More information on these hazards should be developed and the public must be better informed of them in order to minimize their losses.

### Bay and Estuarine Management

The state's bays and estuaries are an important public resource. They provide habitat for fish, birds, and other wildlife; they afford recreation and scenic enjoyment to both tourists and residents; and they contain important archaeological sites and historic treasures. These same bays and estuaries provide waterways and mineral production sites essential to the state's economy, and waterside locations are highly prized for resort and second home development. Despite the fact that the multiple uses and values of the state's bays and estuaries are well known, the permitting for various interacting bay uses is conducted by several different agencies—but without unifying policies as to the consequences of their separate decisions. Most significantly, provision must be made for adequate inflows of fresh water, sediment, and nutrients into the bays so that acceptable levels of biologic productivity can be assured. Furthermore, to achieve the best combinations of uses of these bays, careful plans for siting waterways and spoil disposal areas must be made, and activities which would disturb bay bottoms and wetlands must be closely examined.



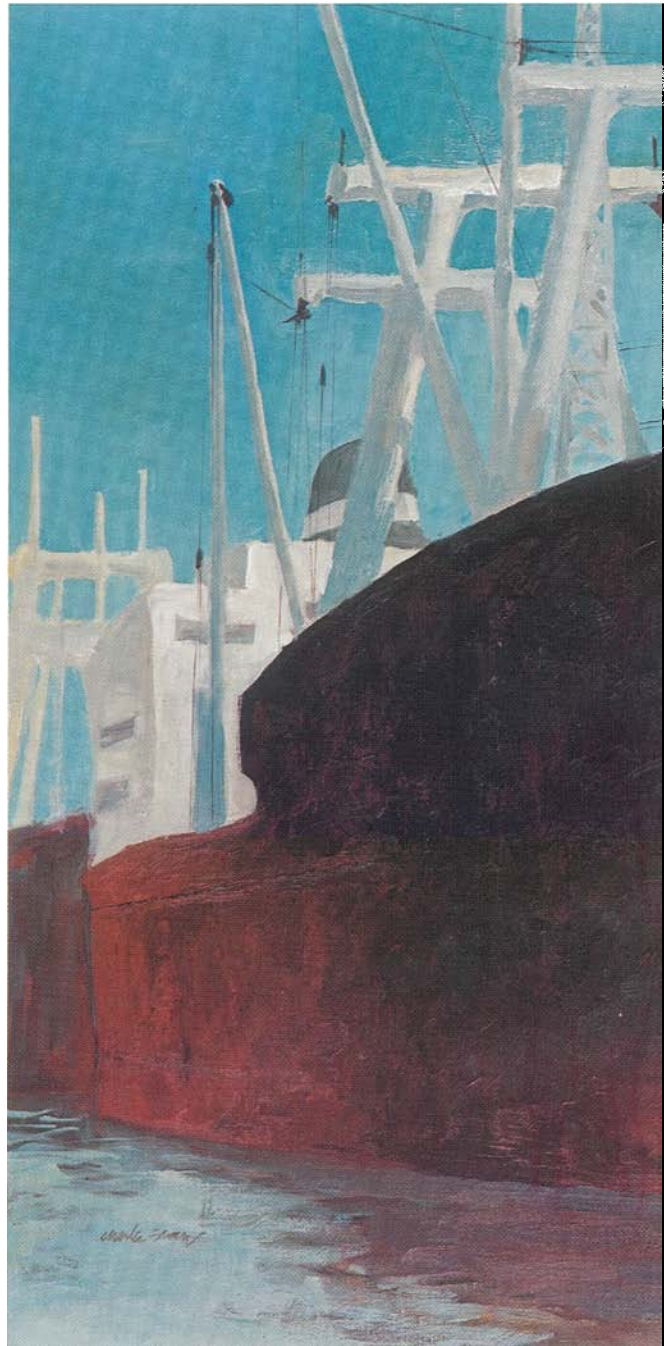
## Overview

To improve the present coastal management efforts of the state will require only a few changes, but they are very important ones. The improvements will make better use of present funds, personnel, and programs; yet they can be achieved without creating a superagency, expanding bureaucracy, increasing costs of government, or infringing on property rights. The process necessary to achieve this improvement is established by the following four recommendations.

1. The ICNRE should be transformed into a policy-level council for reviewing, proposing, and coordinating the state's coastal policies and activities. For convenience, this council will be referred to as the Natural Resources Council (NRC). This change should make coastal management more accountable to the public, the governor, and the legislature. It should also direct existing funds and personnel to the most important coastal needs.
2. An organized information system, housed in the Governor's Office, should be established. This system would provide the basis for better permitting and planning decisions on the use of coastal resources. It would also improve agency coordination in existing permitting procedures and other review processes. Finally, the information system would furnish a means for updating the boundaries of the coastal management area and for identifying new coastal data needs.
3. A process should be established for assessing, in advance, the probable economic, environmental, and social effects of specific activities planned for particular coastal locations. As part of their assessments of coastal activities, state agencies should be required to use this or a similar routine and should be required to consider the concerns of other state and federal agencies in reviewing coastal activities.
4. The management process should focus on the coastal waters and the shorelands closely related to these waters in order to assure that improved coordination, information, and decision-making processes for this area are provided.

Other recommendations directed to specific topics are

1. that subsidence control and sand dune regulation be reviewed,
2. that state wetlands policies and programs be clarified and better coordinated and that a state wetlands regulatory program applicable to all dredge and fill operations in coastal waters except major navigation proj-





CHAPTER IV

# A PROPOSAL FOR IMPROVED COASTAL MANAGEMENT

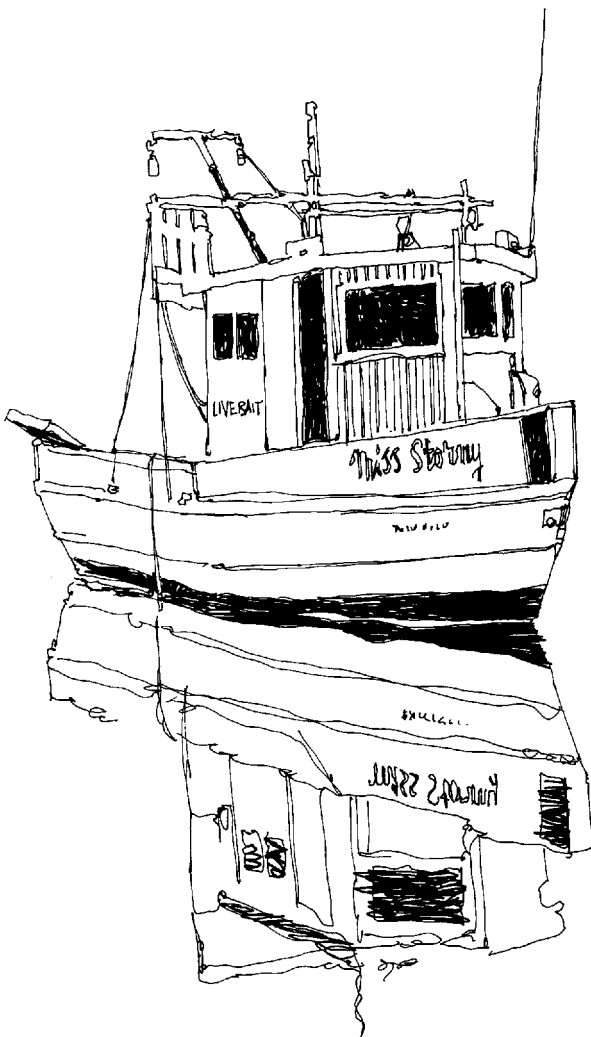


ects be created so that delegation of Corps of Engineers authority in this area can be pursued,

3. that the necessary levels of freshwater inflow to the bays and estuaries be recommended to the governor and that equitable means to assure these levels in drought times be proposed to the governor, and
4. that an improved state-federal coordination technique be implemented.

These proposed recommendations do not present the only way to manage the coast, but they offer a set of improvements which are practical and can be effective within the board and commission form of government established by the state constitution. The following principles have been considered in evaluating the state's alternatives:

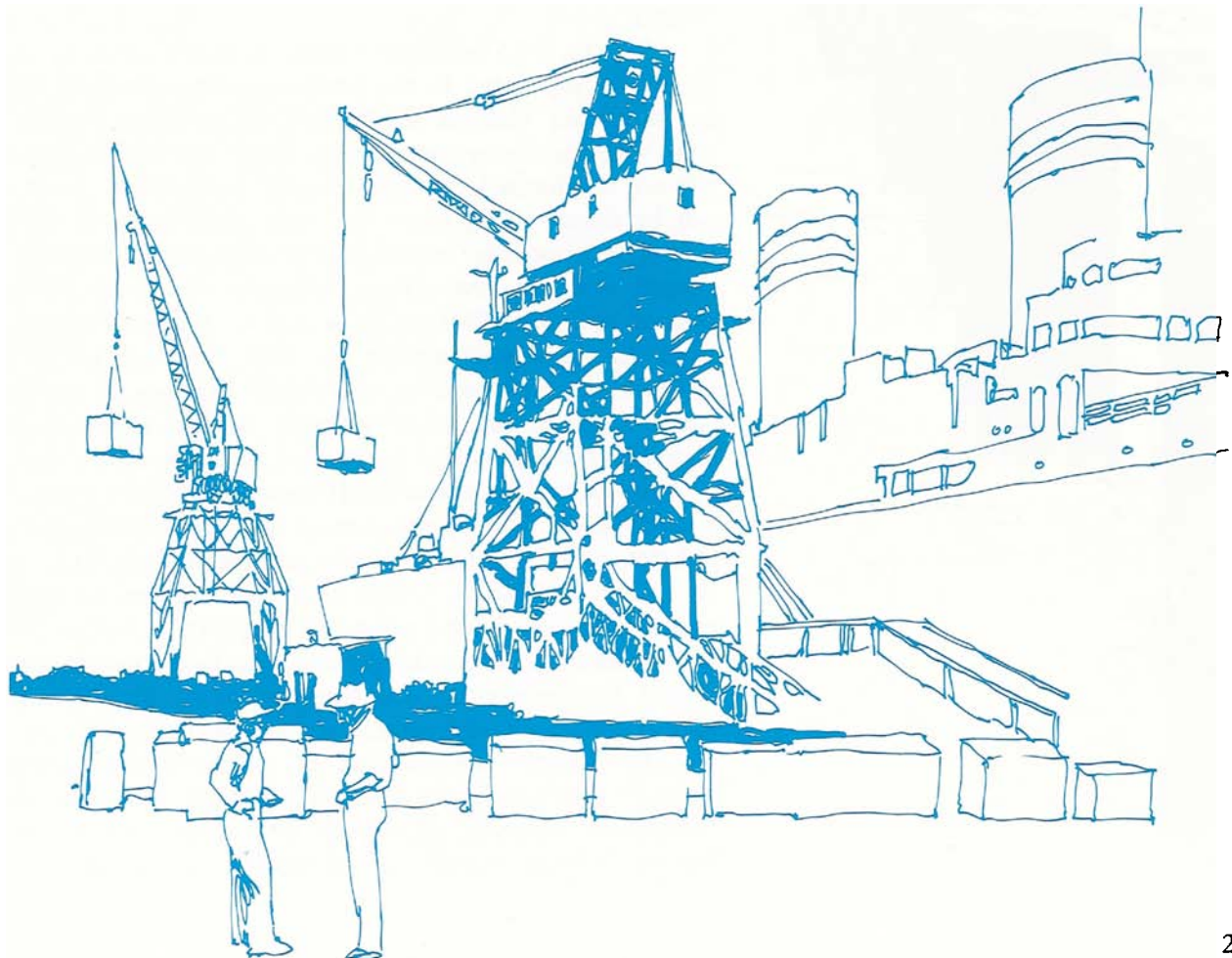
1. Human well-being should be the first concern of the government in balancing resource use with continuing coastal resource productivity.
2. Private property rights should be protected.
3. Improved coastal management should help solve problems not adequately met by present public or private actions.
4. Where market allocation of resources works satisfactorily, it should continue without undue governmental intervention.
5. Insofar as possible, the current coastal management policies and practices that have proved successful should be retained.
6. Some general policy priorities for coastal management exist, but there should be a systematic way to review and recommend priorities.
7. Coastal management should be fair. The various considerations applied in governmental decision-making on coastal resources and activities should be identified, and decisions should be based on rational standards.
8. A systematic and flexible activity-assessment process is needed to allow the state's agencies to exercise their present authority properly and to avoid arbitrary decisions.
9. Decisions must take into account overriding state or national concerns, and a flexible management process will be needed to allow for changes in these concerns.
10. The preferences and priorities of local citizens should be considered, and whenever possible, decisions should be made at a local level of government.
11. The coastal management process and governmental decision-makers should be accountable to the public.
12. Coastal management should be visible and understandable to the people. There must be effective means for the public to be informed about and comment on the workings of the coastal management process.



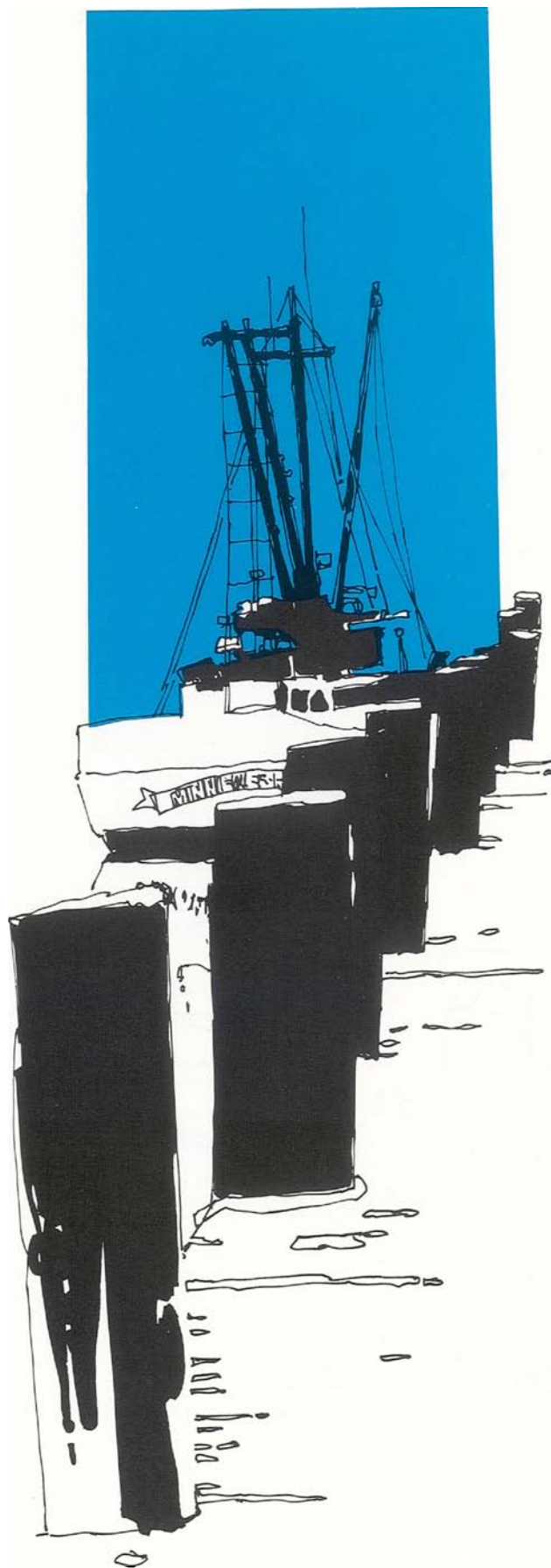
13. Coastal management should be cost-effective. It should make better use of existing governmental expenditures and strive to avoid new, higher costs in government by focusing efforts on highest priority needs and reducing duplication.
14. Finally, Texas' coastal program should satisfy requirements under the federal Coastal Zone Management Act of 1972. A federally approved program will be able to extend state authority over most federal activities within the state's coastal management area. Approval will also mean federal matching funds will be available to help implement the program.

#### Establishment of the NRC

Four changes are needed to transform the present ICNRE into a natural resources council (NRC) which can serve as a policy-level council for reviewing, proposing, and coordinating the state's coastal policies. First, each agency currently represented on the ICNRE should be represented on the NRC by a gubernatorially designated member of that agency's board or commission who would serve as the voting member for that agency. Executive directors would continue to attend—and would be more likely to attend—but as nonvoting members.







Other support staff from each agency would attend as requested by their respective executive directors. The present ICNRE should not be expected to coordinate the state's coastal policies and activities because it is composed principally of agency executive directors—administrators—rather than officials responsible for policy-level deliberations. Board and commission members, however, are private citizens appointed by the governor to establish agency policies pursuant to constitutional and legislative directives. In contrast to an executive director, whose perspective is necessarily narrower because of his responsibility for a single agency, a board or commission member is called upon to take a larger view in setting agency policy. Effective policy coordination among agencies also requires this broader perspective.

The second change required is to provide that the NRC's membership include, in addition to all agencies presently represented on the ICNRE, nonvoting representatives of the Governor's Energy Advisory Council, the Attorney General's Office, and the Legislative Budget Board (LBB). The first two are necessary because they have important policy concerns affecting the coast. A representative of the LBB is needed in order that the NRC may serve as a continuous source of information on coastal matters to the LBB.

Third, the NRC should be chaired by the governor, the state's chief fiscal and planning officer. In his absence, only a full-time personal representative of his office should lead the council.

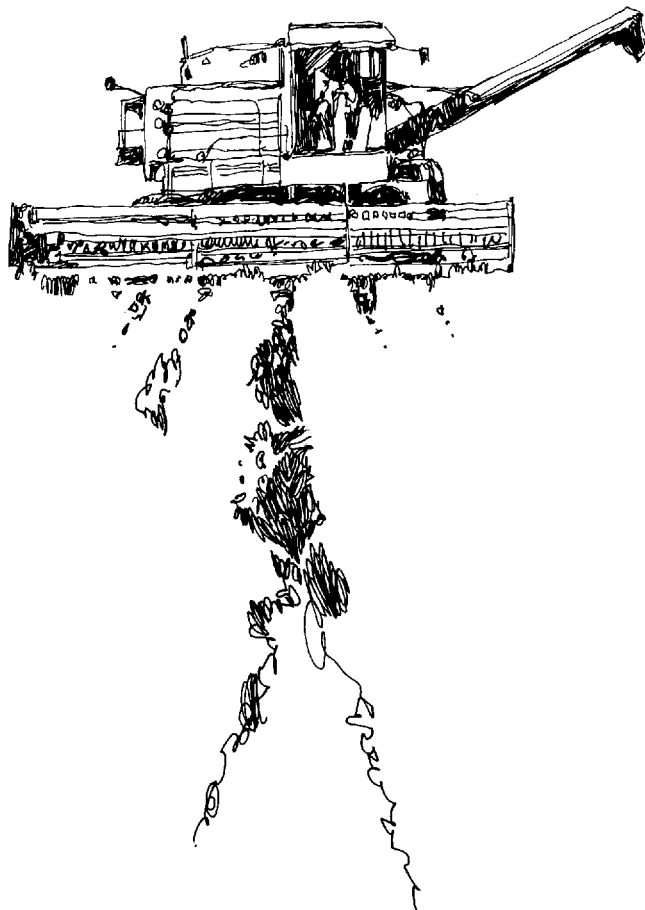
Fourth, a 15-member citizens' advisory panel to the NRC should be appointed by the governor. This committee would be an important channel for further citizen participation in the state's policy formation process. Since the NRC's responsibilities are not limited to coastal issues, the advisory panel should not be drawn solely from the coast. Statewide representation balancing economic, social, and environmental interests is suggested, with no fewer than five positions to be filled from coastal counties. This group would be provided staff services from the small staff serving the NRC. Through its powers to monitor the NRC and to hold public hearings, this committee could increase the public visibility and accountability of the state agencies and would assure that local views are aired.

Supported by a small staff responsible to the governor, the council would develop and present recommendations for coastal policies, priorities, and activities in a biennial report to the governor and legislature. Other council functions would include commenting on coastal programs proposed in budget requests, recommending data management standards, developing techniques for systematic permit review, monitoring coastal planning and research, and conducting special studies.

To prevent continuation of an ineffective organization beyond a reasonable trial period, the NRC should be designed to dissolve automatically at the end of four years unless the legislature finds that the council merits continuation. Written

into the council's statutory charter, this feature should put the council on notice that a superfluous organization will not be tolerated. Such a provision would also clearly communicate the people's intent that the council perform its function vigorously.

This transformation of the ICNRE into the NRC offers four important advantages. First, it increases the visibility of agency policies and actions so that the legislature, in exercising its budgetary authority, and the governor can hold the state's agencies more accountable for the effectiveness and economy of their efforts. Because the essential problem of coastal management in Texas is not a lack of policies, but a failure to support those policies with adequate funding, performance reviews, and coordinating efforts, the proposed NRC is the appropriate response to the Texas situation. Other states may lack information, policies, programs, or personnel, but in Texas, the need is to assure the appropriate ties between budgeting and performance. It does not, however, create a superagency or threaten the legitimate independence of agencies to check and balance each other. Second, the minor changes required for implementation are neither difficult nor costly, because the proposed recommendations would leave the operating authority for coastal management with the state's existing agencies. Third, the NRC would offer greater opportunity for gubernatorial leadership in all matters of coastal policy and budgeting. Finally, providing for automatic dissolution of the agency at the end of four years puts the council on notice of the need for effective performance, and it assures that if the council is ineffective, it will not continue past its trial period.



### Proposed Changes in Information Management

To assure thorough coordination of the state's information management activities and to provide the current, reliable data necessary for managing coastal resources effectively and economically, three improvements in present practices are needed. First, to assure coordination of the state's coastal research and monitoring efforts, the NRC should identify and rank the state's coastal data needs. This will provide the governor and legislature with valuable background information for determining funding priorities. Specific information is needed:

1. The locations and identifying characteristics of the composite resource areas found in coastal waters should be monitored, and current systems diagrams of the characteristics, processes, and products of each composite resource area of coastal waters should be maintained.
2. Further details are required on the causal relationships linking the coastal activities to environmental changes, and linking environmental changes back to economic consequences.
3. Additional economic data to refine the state's input/output model are needed, especially for those sectors using or depending on coastal waters.



4. Information on the nonmarket values of coastal resources is needed. This would include natural productivity as well as aesthetic and social values.

Second, to ensure that the information gathered by many different institutions is compatible with existing state data systems and equipment, the NRC should develop and recommend to the governor standard data formats, data-gathering procedures, and storage systems for use by the state. The Governor's Office should then require all state research and monitoring projects to satisfy those criteria. The Texas Natural Resource Information System (TNRIS) has made significant progress toward identifying such standards, and the NRC should build upon that effort.

Third, to assure ready availability of state data to all users, a computerized data bank responsible to the governor and linking all university and state agency data banks should be established.

### Proposed Activity-Assessment Routine

To ensure systematic consideration of the environmental, economic, and social consequences of coastal activities by the state's permitting agencies, all permitting agencies should be required to develop decision-making processes which take reasonable account of these considerations, whether by voluntary adoption of the proposed assessment routine or by use of a similar systematic review process. To assist the state's agencies in meeting this requirement, an activity-assessment routine is proposed. This routine organizes the permit application evaluation process so that the decision-maker is directed in an ordered sequence to the important environmental, economic, and social questions presented by a permit application. The analytical routine also identifies steps which might be taken to enhance or reduce specific consequences of an activity. This process does not restrict the decision-maker's discretion in awarding or denying a permit. It does make possible, however, a full accounting of the facts and reasons underlying a decision; and any interested party should be entitled to such an accounting.

To assure full and fair consideration of the whole of state policy and of the legitimate national interest, all agencies should be directed to harmonize their coastal decisions to the fullest extent possible under present law with all of the state's coastal policies and with the national interest.

### Proposed Management Boundary

The proposed boundary for state coastal management purposes includes the coastal waters and only those closely related shorelands that are intimately related to the coastal waters. This means that only a fraction of each coastal county is within the management area (plates 1-7).

The seaward boundary of the coastal management area lies three marine leagues (10.35 miles) offshore in the Gulf of Mexico, and all islands in the state's coastal waters are included



in the management area. The landward boundary includes both coastal waters and those shorelands that are so closely connected with the coastal waters that human or natural effects on one area will cause effects on the other. This boundary is difficult to locate permanently because areas such as dunes or wetlands shift. Salt- to brackish-water marshes are in the management area, but freshwater wetlands are excluded. Only those dunes and blowout areas next to the Gulf shoreline are included.

This management area is proposed for two reasons. First, it establishes the geographic area within which the state's coastal management activities should be focused to improve the coordination, economy, effectiveness, and accountability of government. Second, if the state's coastal program is certified as expected under the federal coastal management act, then the proposed boundary determines the area in which federal activities must conform to the state's program.

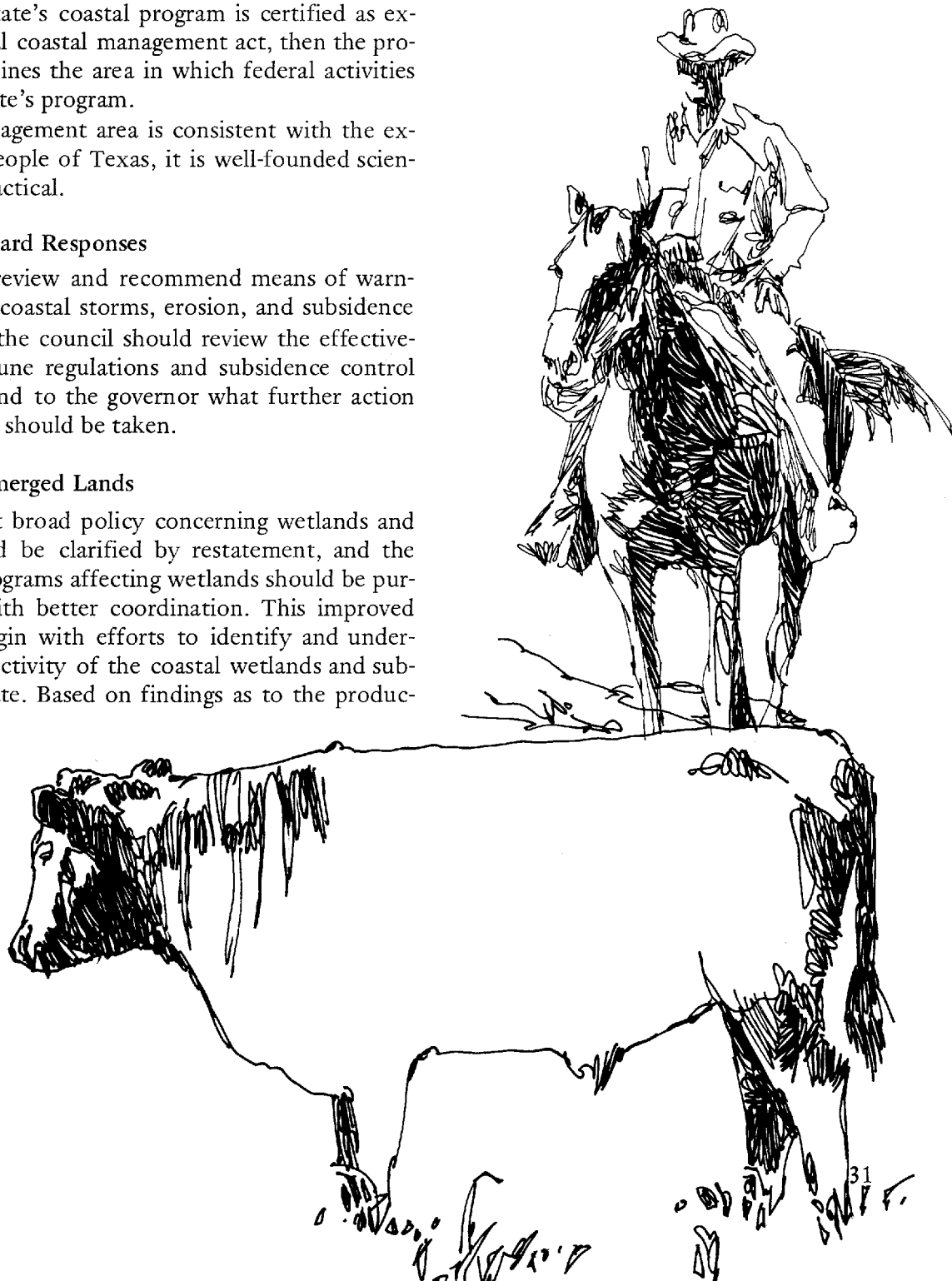
The proposed management area is consistent with the expressed wishes of the people of Texas, it is well-founded scientifically, and yet it is practical.

#### Proposed Review of Hazard Responses

The NRC should review and recommend means of warning property owners of coastal storms, erosion, and subsidence problems. In addition, the council should review the effectiveness of existing sand dune regulations and subsidence control measures and recommend to the governor what further action on these matters, if any, should be taken.

#### Coastal Waters and Submerged Lands

The state's present broad policy concerning wetlands and submerged lands should be clarified by restatement, and the state's activities and programs affecting wetlands should be pursued vigorously and with better coordination. This improved coordination should begin with efforts to identify and understand the varying productivity of the coastal wetlands and submerged lands of the state. Based on findings as to the produc-



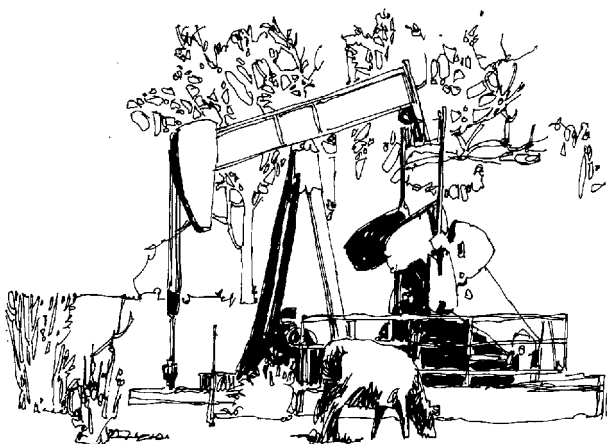
tivity of specific wetland areas, the state should make a concerted attempt to acquire by gift or purchase for public management those areas of critically important productivity.

These state efforts toward better information, policy clarification, and interagency program coordination will be augmented by implementing the foregoing recommendations for data management, activity assessment, and policy-level program review. Better data management and activity assessment should also enable the state's agencies to participate more effectively in the processes of the Corps of Engineers for regulating dredge and fill operations in coastal waters.

Present Corps processes for deciding dredge and fill permit applications have been criticized as too protracted and not sufficiently focused upon the relevant issues. To expedite, to rationalize, and to bring under more local control the processes affecting dredge and fill operations in coastal waters, the state should be prepared to assume primary responsibility for regulating dredge or fill activities which occur in coastal waters but which are not conducted by or under contract to the Corps. State wetlands regulation should not be undertaken unless it can be done in place of the Corps' wetlands regulation activities under Section 404 of the Federal Water Pollution Control Amendments. This means that a delegation of Corps responsibility is desirable and should be sought under both the Coastal Zone Management Act and any other relevant federal legislation. To assure state preparedness, appropriate state statutory authority vesting regulatory responsibility in a specified agency should be enacted. The statute should be written, however, so that commencement of regulation awaits the governor's determination that the relevant responsibilities of the Corps can be delegated to the state.

### Bay and Estuarine Productivity

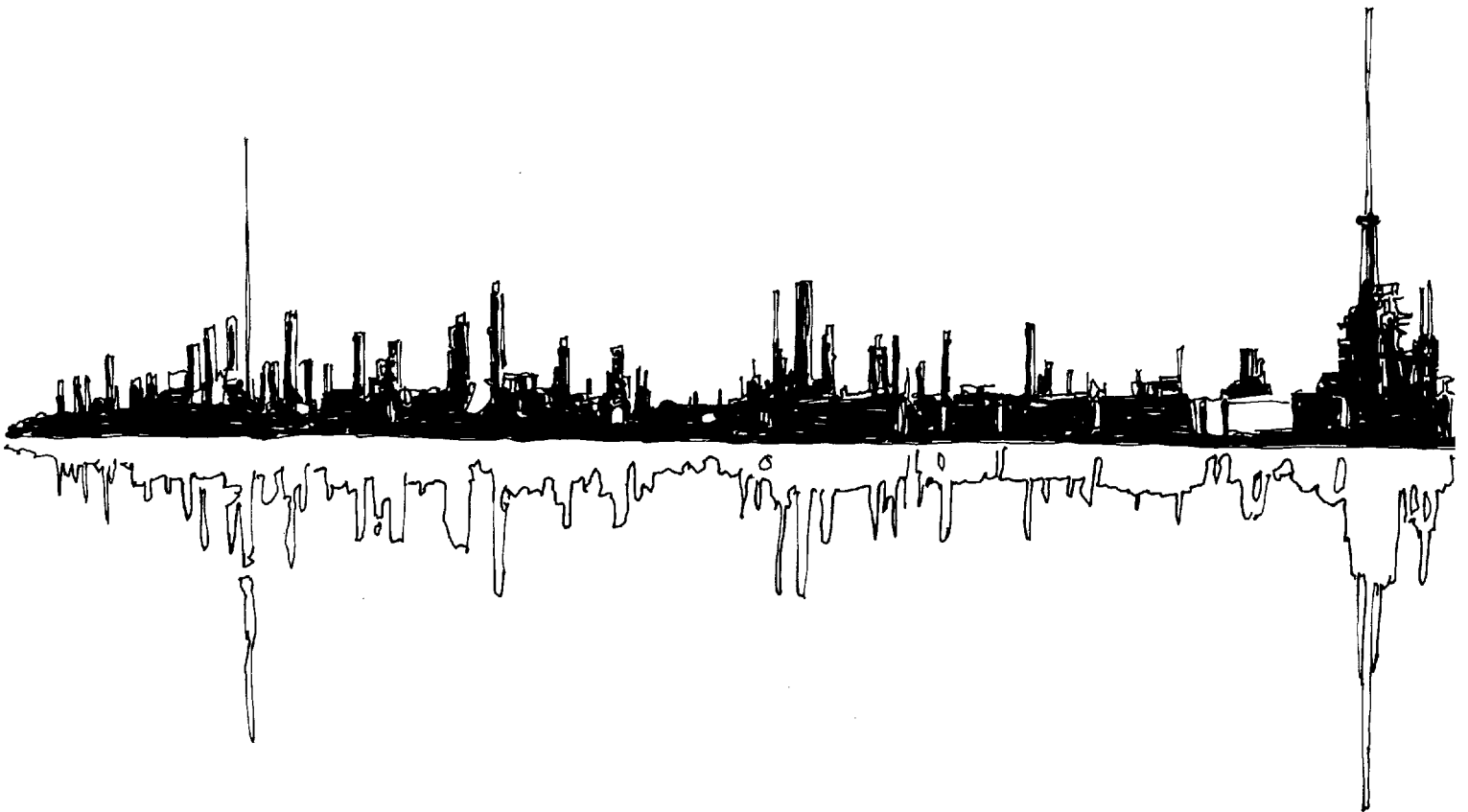
The NRC should be directed to recommend to the governor means of determining performance standards and methods to ensure the delivery of adequate amounts of fresh water, nutrients, and sediments to the bays and estuaries. The inflow standards should be determined on the basis of the available data about the requirements of these areas. The water needs of upland areas should be taken into account, and the NRC's recommendations should be reviewed as better information becomes available.



## Federal Coordination

The state should obtain federal approval of its coastal management program so that it can require that federal activities in or affecting its coastal area conform to the state's program "to the maximum extent practicable." To be approved, a state program must include a method for considering the national interest in its coastal resources and for protecting that interest. To meet these requirements, it is recommended that the following actions be taken:

1. The NRC should be directed to maintain proper coordination with all interested federal agencies through the Governor's Office of State-Federal Relations and the Federal Regional Council.
2. All agencies should be directed to give full and fair consideration to the national interest in their deliberations on coastal resources.
3. The NRC should monitor all federal actions that may affect the Texas coast to ensure their consistency with the state's program.
4. If disputes between federal and state agencies in coastal matters cannot be resolved by the parties, the governor should determine the state's position. After his decision, an interested federal agency could pursue the matter further according to applicable federal regulations.





## Summary of Recommendations

To achieve an orderly process for managing coastal resources, the following changes are recommended:

1. Draw the boundaries of the coastal management area to
  - a. include all coastal waters to the three-league limit—nearshore Gulf areas, inlets and tidal deltas, bays, lagoons, oyster reefs, grassflats, spoil deposits, channels, coastal lakes, tidal streams, and river mouths up to the farthest point of seawater intrusion;
  - b. include all beaches, barrier islands, spoil islands, wind-tidal flats, tidal marshes, washover areas, and sand dune complexes on the Gulf shoreline; and
  - c. exclude lands held under the exclusive control of the federal government.
2. Convert the Interagency Council on Natural Resources and the Environment (ICNRE) into a Natural Resources Council (NRC) which would function as a policy-level council to review and propose policies, priorities, and activities for the state's coastal program. This requires the following steps:
  - a. Each agency presently represented on the ICNRE should be represented by a member of the agency's board or commission as the voting member. Executive directors would attend, but as nonvoting members.
  - b. Include one representative each from the Governor's Energy Advisory Council, the Attorney General's Office, and the Legislative Budget Board as nonvoting members of the NRC.
  - c. Create a 15-member, gubernatorially appointed citizens' advisory committee for the NRC, with a chairman who is a nonvoting member of the council.
3. Establish in the Governor's Office a practical process for systematic assessment of the environmental, social, and economic consequences of proposed coastal activities. A state data management system based on existing systems should be structured to focus research on priority state needs and to provide data for the assessment routine and thereby assist state decision-making. Results derived from application of the activity-assessment routine and any information housed in the state data management system should be made readily accessible both to governmental entities and to the general public.

4. Direct all state regulatory agencies to use either the activity-assessment process developed for the Governor's Office or a similar process to assess environmental, social, and economic effects in reviewing all permit applications for proposed activities within the management boundary.
5. A three-part response should be made to the problems posed by coastal hazards.
  - a. Direct the NRC to determine how best to give notice of coastal hazards to purchasers and owners of coastal property.
  - b. Direct the NRC to determine whether additional protection for coastal dune areas is needed, and, if so, how to accomplish it in a manner consistent with the protection of private property rights.
  - c. Direct the NRC to review the state's efforts toward solving the subsidence problem and determine whether further action is needed.
6. Coordinate and clarify state wetlands policy; and, if the wetlands regulation program of the Corps of Engineers can be delegated to the state, establish a state wetlands regulation program to cover all dredge and fill activities in coastal waters except large navigational projects, such as those conducted by the Corps. Avoid duplication of the Corps of Engineers permitting processes.
7. Direct the NRC to recommend to the governor, on the basis of existing information, the freshwater, sediment, and nutrient standards which should be assured for the state's bays and estuaries. In addition, direct the NRC to recommend to the governor methods to assure proper distribution of water for upland and coastal needs in times of drought.
8. Direct all agencies to consider the national interest in exercising their powers, and direct the NRC to monitor federal actions on the coast for consistency with the state's coastal program. If disputes between federal and state agencies in coastal matters cannot be resolved by the parties, the governor should determine the state's position. After his decision, an interested federal agency could pursue the matter further according to applicable federal regulations.

## Overview

The proposed coastal management program discussed in detail in Chapter IV offers four principal benefits to all coastal residents:

1. the preservation of state responsibility over coastal policy against potential federal intrusion,
2. increased accountability of state agencies for their activities on the coast,
3. increased efficiency in state coastal programs, and
4. practicality.

The proposed program would focus the coastal management efforts of state agencies on problems of concern to the full range of coastal interest groups without increasing current regulatory authority. Where government can improve a situation, the proposed program supplies a mechanism for the agencies to use in analyzing and solving coastal problems.

The recommendations made in this document may, like any proposals for change, have potential drawbacks which should be carefully analyzed. However, preliminary analysis shows that the advantages of the proposed program far outweigh the disadvantages. The costs involved in restructuring the ICNRE to establish the NRC, implementing the activity-assessment routine, and assuming the Corps of Engineers' jurisdiction over saltwater wetlands would be mitigated by direct savings to the state and private sectors and by some federal funding. Costs would be further reduced by increased interagency cooperation.

## Preservation of State Control of Coastal Policy

The federal government, through the Coastal Zone Management Act, offers the State of Texas the opportunity to

- regain some authority presently delegated to the federal government,
- require federal activities on the coast to conform to state coastal policy, and
- prevent imposition of any federal coastal plan.

An approved state coastal management program may preempt imposition of a federal program. Were Texas not to act, and the federal government to decide that it was necessary to manage the Texas coast, current federal thinking might well lead to the imposition of zoning procedures. The undesirability of such an approach for an area as large and diverse as the Texas coast is evident. Implementation of the recommendations made in Chapter IV would allow Texas to implement procedures and policies that best serve its coastal management needs.

The Coastal Zone Management Act allows a state to increase its influence over federal activities in its coastal zone. The



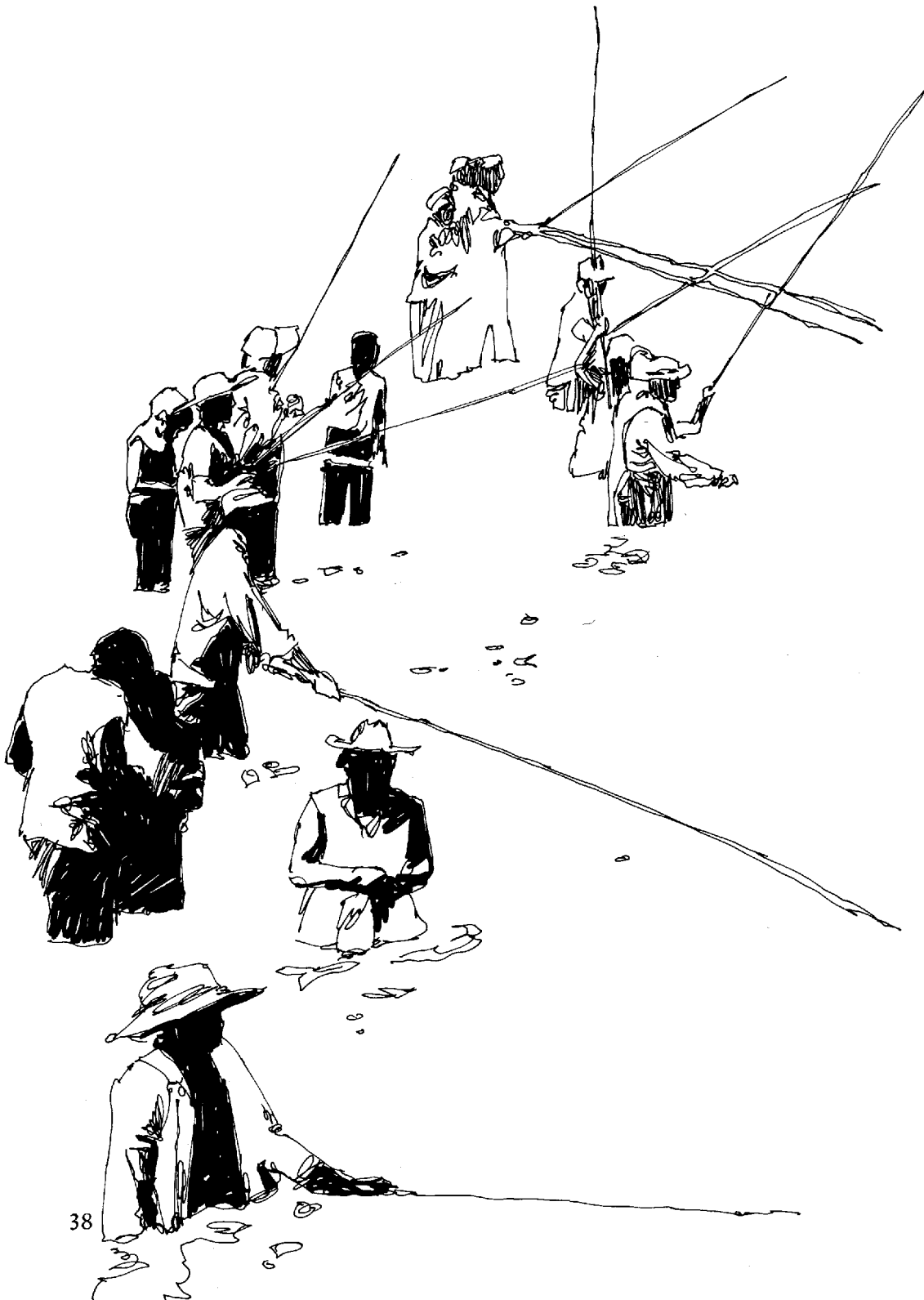


CHAPTER V

# ADVANTAGES OF THE PROPOSED MANAGEMENT PROGRAM



Secretary of Commerce is empowered to require federal agencies, with the exception of the Environmental Protection Agency (EPA), to conform their coastal activities to the state's approved program to the maximum extent practicable. It should be the burden of the federal agency proposing an activity on the coast to prove that the activity does indeed conform to the state's program to the maximum extent practicable.

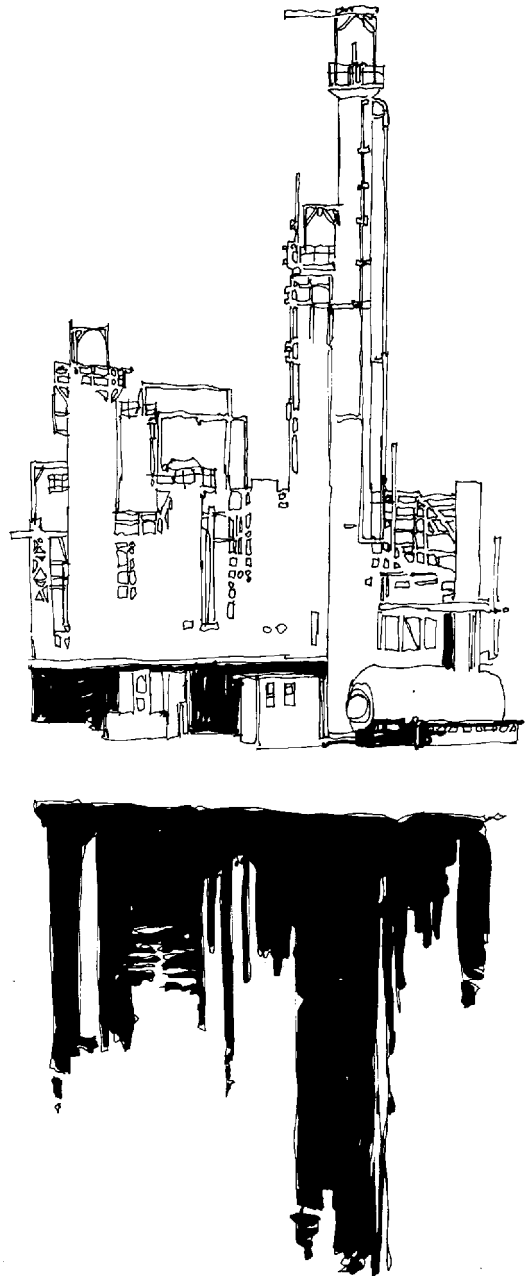


Perhaps most significantly, under the proposed recommendations, the state would assume permitting power over its wetlands. This power is presently exercised by the Corps of Engineers. The advantage of returning responsibility for this power to the state is seen in the difference between state regulatory proceedings and the proceedings conducted by the Corps. The state regulatory proceedings are quasi-judicial. Only evidence germane to the issues affecting the permit decision may be introduced. Corps proceedings allow any number of opinions to be presented and discussed at great length, whether they are relevant or not. Thus, permit decisions—approvals or rejections—are slowed, and both public and private costs are increased. The length of these hearings does not noticeably improve the quality of the decisions. By assuming permitting authority over the wetlands, the state would be in a position to efficiently make and implement policy in some of its most sensitive coastal areas.

### Increased Accountability of State Agencies

This report has detailed the need for a systems approach to coastal policy formation in Texas. Basically, a systems approach to the coast and coastal policy is one which considers the coast to be a whole composed of interacting parts, each related to the other through one or more orderly processes. This view assumes that the alteration of any part of the coastal system is likely to produce changes in other parts and that policy made for any part of the coast must be reviewed for its consequences upon the rest of the coast. At present, no agency or elected official has the mandate or capability to make policy for the coast on a systems basis. Yet an overview of the coast as a system is essential if the state is to accommodate the maximum range of activities in coastal areas while conserving the underlying resource base at an acceptable level. Without a systems approach to the coast, state action can only blindly seek to foster the fullest possible yield of benefits from coastal resources.

The proposed coastal program creates an organization which can review and recommend coastal policy on a systems basis. The work of this group, based upon the state's best expertise and developed in cooperation with the citizens' advisory panel, would establish a persuasive standard for coastal program priorities and performance which would be highly visible to the public, the legislature, and the governor. The state's coastal agencies, if given the NRC's coastal recommendations prior to their own budget and program preparations, could act upon those recommendations or reject them in favor of other views or advice. In either case, the NRC's recommendations would form a solid basis for open discussion of the state's coastal needs and agency responses. This would result in greater visibility of agency policymaking procedures and greater governmental accountability to the people, the legislature, and the governor. Such discussion of coastal policy would also set the



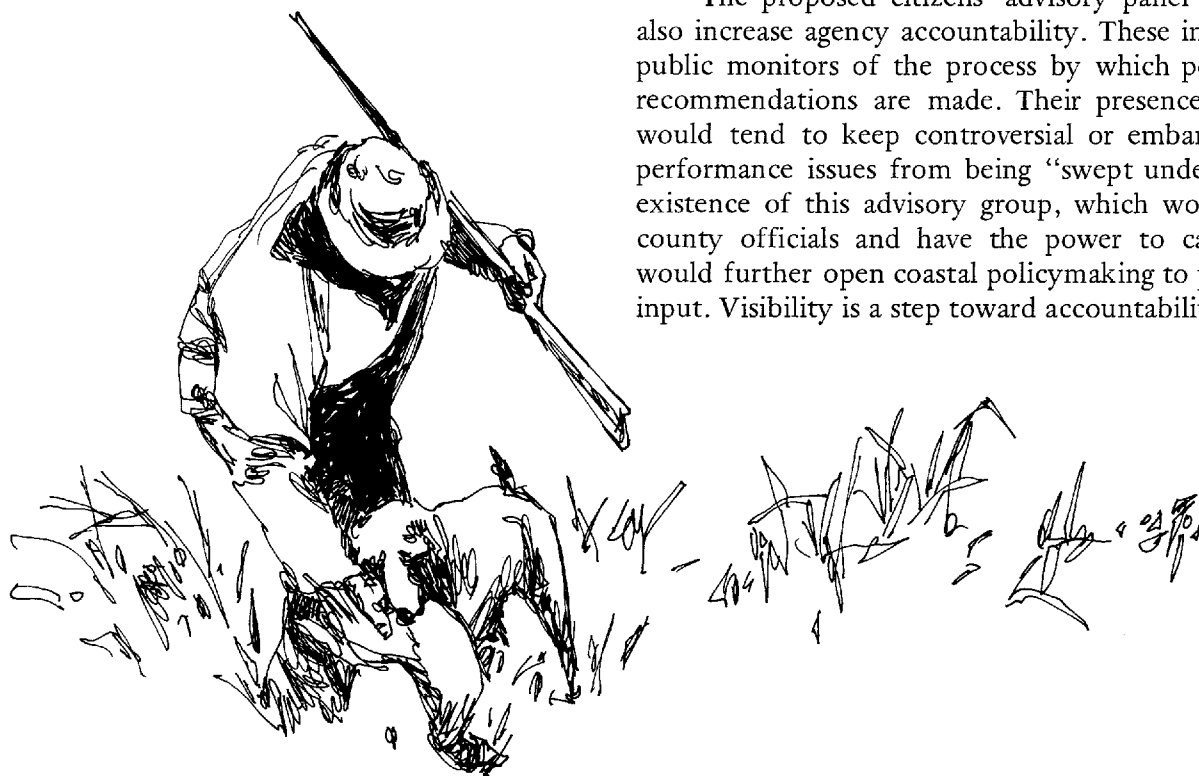


stage for later reviews of the coastal programs developed to meet the state's needs. Program performance could then be measured against the state's identified coastal needs. Because the essential problem of coastal management in Texas is not a lack of policies but a failure to support those policies with adequate funding, performance reviews, and coordinating efforts, the proposed NRC is the appropriate response to the Texas situation. Other states may lack information, policies, programs, or personnel, but in Texas the need is to assure the appropriate ties between budgeting and performance.

Unless the NRC is created as recommended, effective policy-level review and recommendation of state coastal policies and needs cannot occur. The present ICNRE consists of agency directors, none of whom is empowered by statute to make policy for his own agency, much less for the coast. Only elected officials and board or commission members have the mandate for policy-level decisions. Recomposition of the ICNRE to create an NRC consisting of board members and elected officials will establish it as a policy-level body. For the first time the governor, as chief planning officer of the state, will have a group experienced in all aspects of natural resources policy to advise him on state activities.

The use of an activity-assessment procedure to evaluate proposed activities in the coastal area would increase accountability. Systematic assessment of the effects of proposed coastal activities would provide a logical, scientific basis for permit and program decisions. The results of such analyses, available to all participants in permit hearings, would limit the ability of agency permit grantors, through intent or carelessness, to make arbitrary or capricious decisions.

The proposed citizens' advisory panel to the NRC would also increase agency accountability. These individuals would be public monitors of the process by which policies and priority recommendations are made. Their presence at NRC meetings would tend to keep controversial or embarrassing policy and performance issues from being "swept under the carpet." The existence of this advisory group, which would include coastal county officials and have the power to call public hearings, would further open coastal policymaking to public scrutiny and input. Visibility is a step toward accountability.

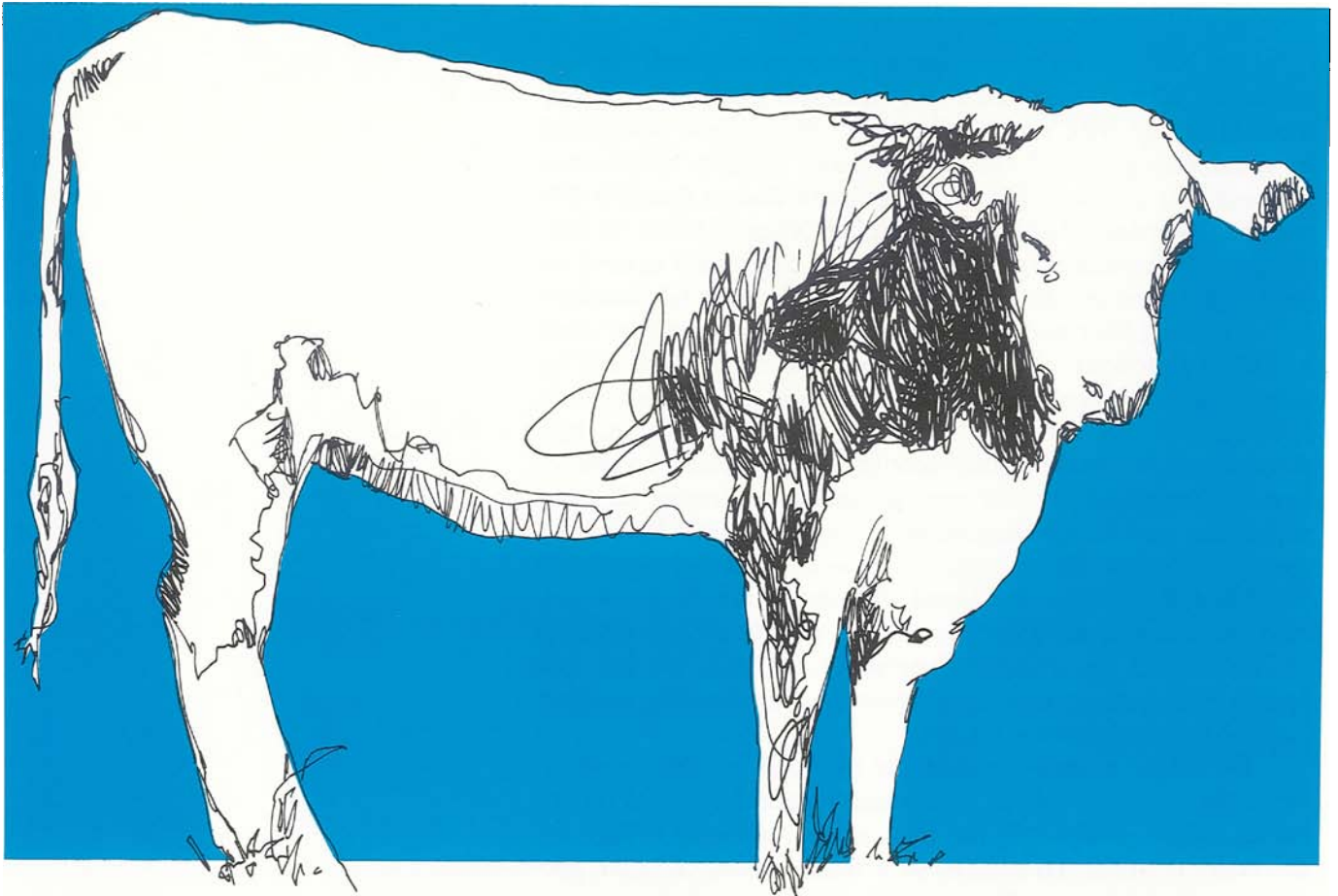


## Increased Efficiency in State Coastal Programs

The NRC would review agency program proposals for conformance with the policies and priorities previously recommended in the NRC's biennial report. This review, conducted by those who proposed the programs and policies, would complement that performed by the Legislative Budget Board (LBB) and the Governor's Budget and Planning Office (GBPO). In fact, the greater familiarity of the NRC with the state's natural resource concerns would mean its assistance could substantially enhance the LBB's and the GBPO's abilities to perform their reviewing functions. Furthermore, because the NRC would be composed of citizen appointees whose jobs and salaries would not be affected by the outcomes of the issues before them, their work would be more readily received as impartial. No matter how dispassionate or objective an agency executive director might be, any recommendation he made which lauded his agency or called for its expansion would not be considered disinterested. Because the board or commission members' primary loyalties to the governor and the people are not thought to be clouded by immediate personal concerns for job and agency prerogatives, they could provide the necessary perspective on the state's coastal efforts.

No single program analyst for the LBB or GBPO now reviews the programs of all the natural resource agencies on the coast, and no analysis of the total natural resource budget for the coast is made. To achieve an effective review of state governmental activity on the coast, agency proposals for coastal programs would have to be identified as such in budget requests. The breaking out of natural resource agency program proposals along policy lines would also serve to point up any duplication in agency requests in a way the state budget process does not presently allow. Agencies would be forewarned that duplication will be noticed, that it is unacceptable, and that systems policy is the standard by which program proposals will be evaluated. The NRC's performance of these functions should substantially increase coordination among state agencies as programs are being planned.

The state's coastal permitting processes are another area in which the proposed recommendations can give greater efficiency. The cost of the permitting process is not simply the amount of funds state agencies devote to permit reviewing. The major cost of permitting is borne by the private individuals and corporations who must apply for permits. It is they who must collect substantial information, analyze it, assemble it, and present it in a form acceptable to state agencies. The proposed program will reduce the cost of obtaining permits in several ways. Analysis of all permit applications with direct and significant impacts on the coastal zone through the proposed activity-assessment procedure will reduce permitting costs by pinpointing the data needed to make sound decisions and indicating data requirements which could be eliminated without a



significant effect on permit decisions. By focusing on only those data relevant to a proposed project, state agencies could devote more time to analysis of the important questions and could request applicants to provide key data in more detail where appropriate.

Consistent analysis of all coastal permit applications can further reduce costs to the public and private sector by increasing the predictability of decisions. One of the most important elements of a good economic climate is the predictability of governmental action. Few development interests intentionally plan projects likely to draw substantial public opposition. Delays caused by lengthy administrative and judicial proceedings greatly reduce a project's profitability, even if necessary permits are finally granted. In addition, the prospect of such delays tends to prevent many projects from even being considered. Consistent analysis of applications will speed permit evaluation and make better decisions possible. This will save time and money for the public, for state agencies, and for developers. Predictability in permitting would maintain and enhance Texas' favorable economic climate for quality economic growth.

Use of the proposed activity-assessment process offers still another benefit. Through this process the agencies would be able to identify important data needs that are not being filled by state agency or university research efforts. These information needs could then be given proper consideration in



the allocation of state research funds and in applications for federal research grants. This would provide professionals with an incentive to focus their research efforts where the results would best improve the quality of state decision-making.

Research efforts are often duplicated. An NRC review process for research should also encourage researchers, state agencies, universities, and private research organizations to better coordinate their proposals.

### **Practicality**

The program proposed is not the only one which might theoretically meet the problems of the Texas coast. However, it is superior in very important ways to the alternatives considered. First, this program is acceptable to a wide range of coastal interests. It has been refined and improved through a long series of public hearings and advisory committee meetings, in which industry, agriculture, environmentalists, and local government were represented. Second, this program can be effectively implemented by the governor. It is one thing to assemble a coalition to pass legislation; it is quite another to make the legislation work. Several states have assembled political coalitions which passed legislation, coastal and otherwise, only to find their ideas unworkable and themselves divided when the full implications of their plans became clear. The proposed Texas program, building as it does upon present authority and agency responsibilities, could avoid this problem. The NRC is not made a superagency, since it possesses only advisory authority. It imposes no new regulatory requirements on any permit applicant. It proposes no cumbersome new level of government on the taxpayers of the state. It shortens rather than lengthens the total permit process for development and conservation interests. The program is desirable and workable in the Texas political climate.

### **Potential Disadvantages and Costs**

The Coastal Management Program's recommendations, if adopted, could potentially result in some new costs to the state. These costs would be associated with creating the NRC, implementing the activity-assessment routine, and transferring wetlands permitting authority to the state. Such costs, if any, would be slight, and they would be offset by savings in other areas and by federal funds available to the state for such costs.

In the discussion of the benefits of adopting the proposed program, it has been explained that the program could reduce public costs by decreasing duplication in natural resource activities and by fine-tuning current permit reviewing processes. Increased predictability and more precise data requirements in permitting processes should reduce private costs. A substantial saving in private costs should also result from returning the saltwater wetlands permitting function to the state.

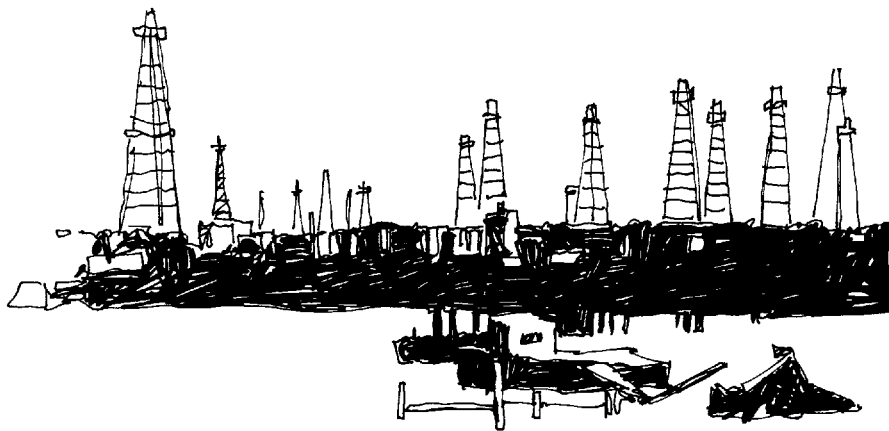
### Creation of the NRC and Establishment of the Activity-Assessment Routine

The steps necessary to establish the NRC as a policy-level body, to provide a small support staff, and to analyze A-95 and permit applications through the activity-assessment routine might require some additional expenditures by the state. However, any added costs would be minimal. The data management function required for the activity-assessment routine could be performed by the Texas Natural Resource Information System (TNRIS) using their existing staff and equipment. The procedures recommended would occupy only a very small percentage of their current capacity. TNRIS would be removed from the Texas Water Development Board to the Governor's Office. There would be no additional overhead costs since overhead functions could be transferred between the Texas Water Development Board and the Governor's Office.

The natural resources planning staff currently budgeted in the Governor's Office would be adequate to manage NRC staffing and the coastal management activity-assessment routine. It is possible that some redistribution of staff classifications and salaries would be necessary to ensure the proper mix of professional skills. Because many of these slots are currently vacant, such adjustments pose no real personnel problem. Taken together, the proposals concerning the creation of the NRC, its staffing, and implementation of the activity-assessment process should not result in any significant increase in total state government expenditures for natural resource management.

### Costs for Transfer of Wetlands Permitting Procedures

It is estimated that the U.S. Army Corps of Engineers currently spends approximately \$600,000 annually in the exercise of its coastal wetlands permitting jurisdiction in Texas. Some of this cost will be transferred from federal to state government if the TCMP proposals are adopted. However, the cost of state government will not be increased by the full amount.



State agencies, particularly the Parks & Wildlife Department, currently devote substantial time to reviewing and commenting upon permit applications ultimately decided on by the Corps. The amount of review time required to actually reach a decision should not be significantly greater if a portion of this permitting authority is transferred to the state. The use of the activity-assessment routine in processing applications should result in savings as discussed above.

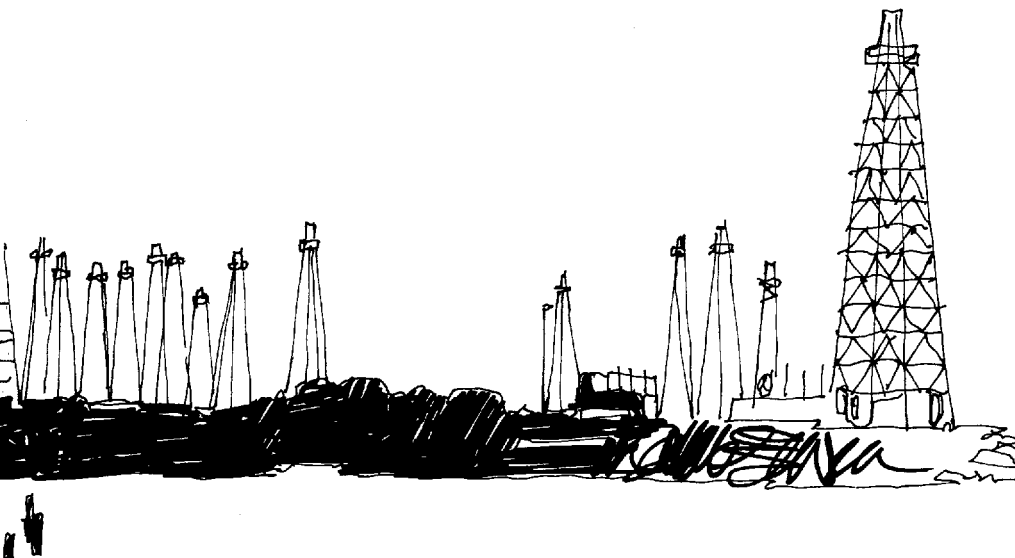
The real savings to the economy of Texas would occur in the private sector. Both environmentalists and industrialists have commented that they find Corps permitting procedures far too long for the purpose they serve. Participation is extremely costly, and the resulting delays in projects are more costly still. The private sector savings from state control of this permitting power should more than offset any increased state costs.

### **Possibilities of Federal Funding**

As mentioned in the previous chapter, it is possible that all or part of the cost of the proposed coastal management program can be met through Coastal Management Act Section 306 funds and Section 701 Planning Grants from the Department of Housing and Urban Development. This would further reduce program implementation costs to the state so that the general revenue fund would not be burdened. In any event, a practical assessment of this program indicates that with or without federal funds, the cost to the state would not exceed the benefits to the public or private sectors.

### **Costs of Change**

Any new program for management of the coast of Texas will require some changes by state agencies and by private interests. Adapting to a new system consumes time and financial resources, and the costs of such an adaptation, even if they





occur only once, must be considered in any calculation of net benefits. The recommendations of the Texas Coastal Management Program carry a very small cost of change because no new regulatory procedures have been introduced. The permit-granting agencies would be unchanged by implementation of the proposed program.

There would be no need for applicants to learn any new intricacies in the regulatory process. This absence of any need to learn new procedures may be even more important to environmental interests than it is to development interests. Industrial interests can pass the costs of a legal and technical learning period through to their customers as part of the cost of doing business. However, many nonprofit groups would find it difficult to bear this cost, and this would curb their participation until they became familiar with the new processes.

Every new program is launched with optimism that it will turn out to be the success its designers intended. But some fail, and a fair regard for experience makes it reasonable to examine the costs of failure. The success of the proposed program depends not only upon organizational structure but also upon the importance the governor gives to the NRC's recommendations and assessments. With poor personnel or lack of executive support, it is entirely possible that the NRC would never be more than a mediocre debating society.

The cost of failure would be very high if a reorganization of existing natural resource agencies into a superagency were proposed. If that superagency failed, state natural resource programs would grind to a halt; and it would be very costly, if not impossible, to reestablish the previously existing agencies. Furthermore, a superagency would, even if a failure, attract a substantial constituency, and the cost of failure could be quite high, since it would not be politically feasible to discontinue the program even after failure was apparent.

The proposed Texas coastal management program would result in neither of these problems. No disassembly of existing agencies is proposed, and no large staff or other well-organized constituency would be brought into existence. There would be no great political cost if the program were to fail.

In the recently proposed state constitution, one of the most popular items was an article which would have dissolved state agencies after a set number of years. Under the Coastal Management Program's proposed recommendations, the NRC would be dissolved and the ICNRE reinstated after four years if the anticipated benefits were not realized.

These features also make it reasonable to consider the use of federal funds to finance any new state costs. There has often been a reluctance to use federal funds because to do so was to restrict the state in its activities and to run the risk of developing a large program with a politically potent constituency only to see the federal funds disappear. The coastal management program would be approved by the federal government in

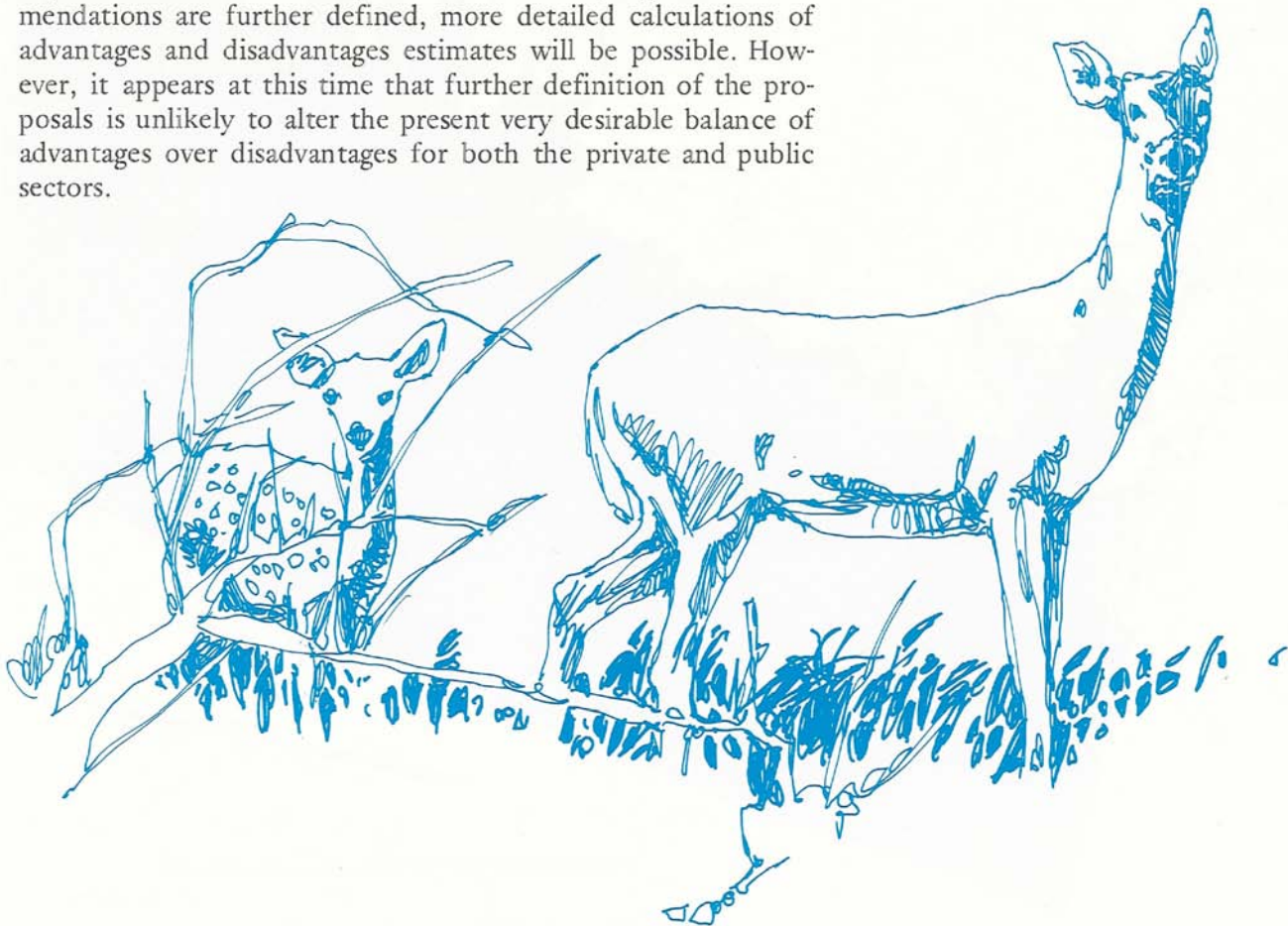
advance of its implementation. The state has full control over whether it produces a program certifiable by the Secretary of Commerce. If federal funds disappear, and the legislature and governor feel that the program is not worth its costs in state funds, it should be simple and politically feasible to disassemble the program. Analysis of the small costs of change and the costs of failure make the proposed program appear even more feasible.

### Control of Cost by Existing Agencies

The ultimate costs of the Coastal Management Program's recommendations will be greatly affected by the degree of cooperation given by state natural resource agencies. The greater this cooperation, the less it will cost to implement the activity-assessment process and the better the NRC will function. The costs of implementing these recommendations will indicate to the governor and legislature how well state agencies are working together on coastal policy issues.

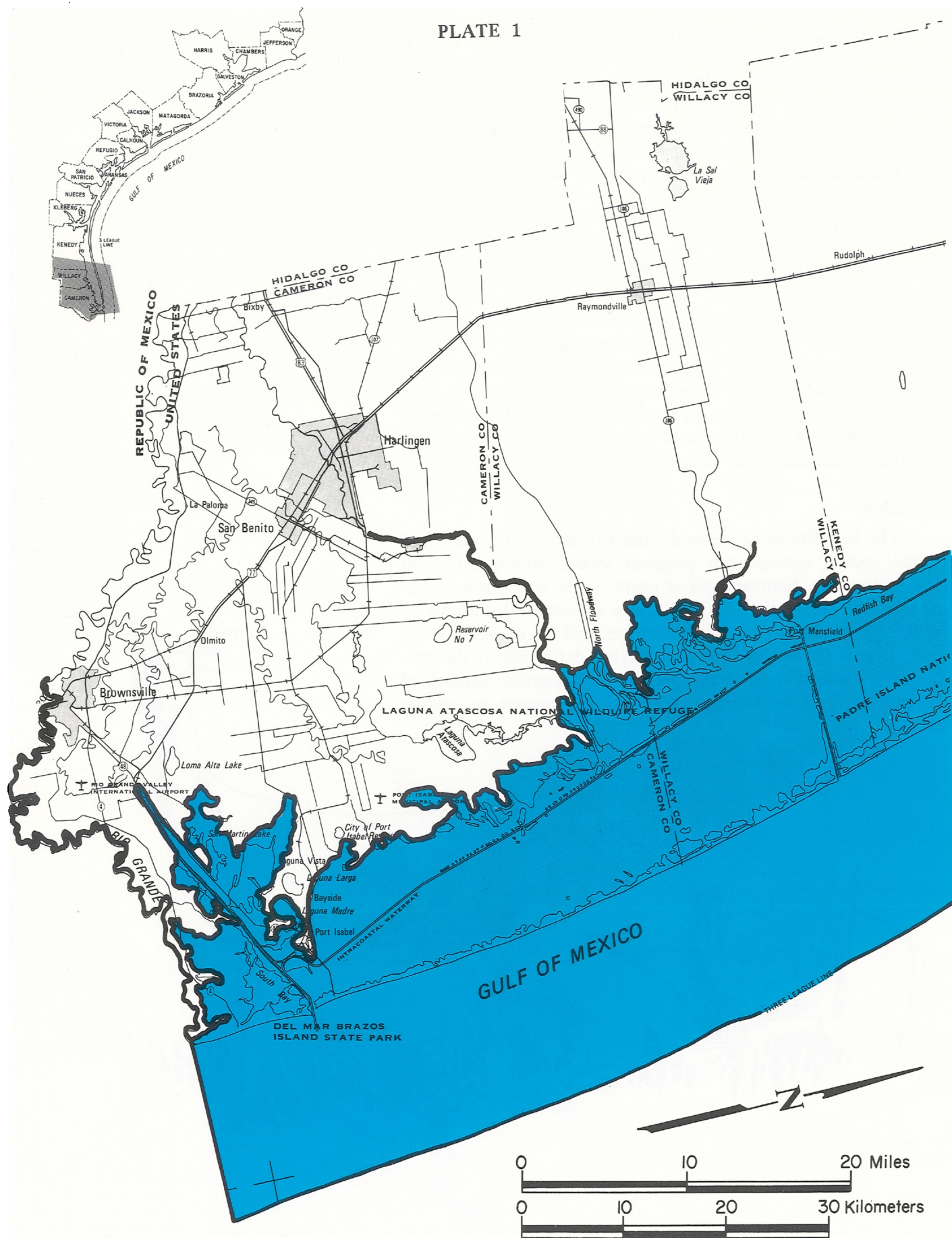
### Summary

The benefits to be derived from adoption of the proposed Texas coastal management program should greatly outweigh any foreseeable disadvantages or costs. As the program's recommendations are further defined, more detailed calculations of advantages and disadvantages estimates will be possible. However, it appears at this time that further definition of the proposals is unlikely to alter the present very desirable balance of advantages over disadvantages for both the private and public sectors.





# PLATE 1





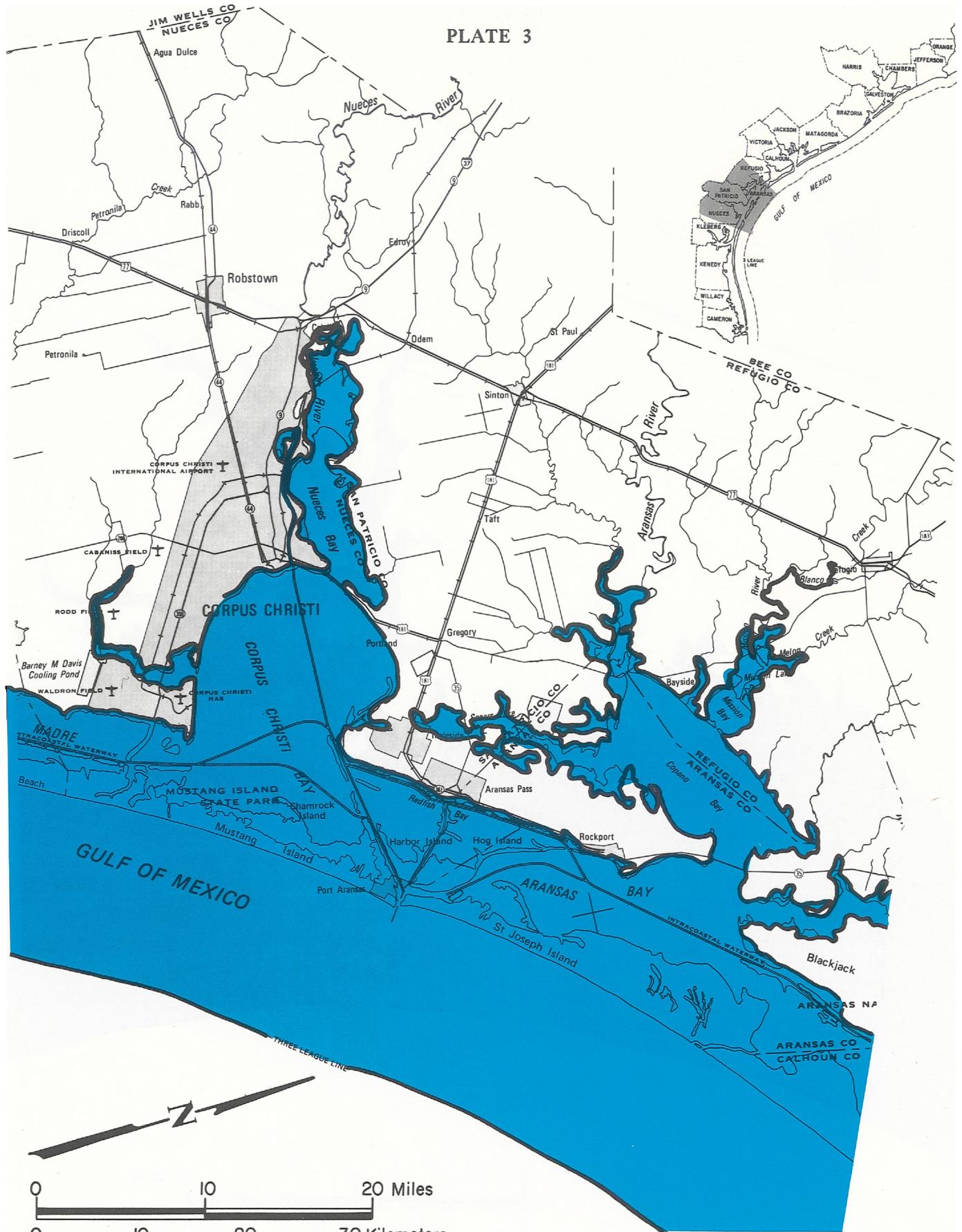
# PLATE 2



Baffin Bay-Laguna Madre Area



# PLATE 3

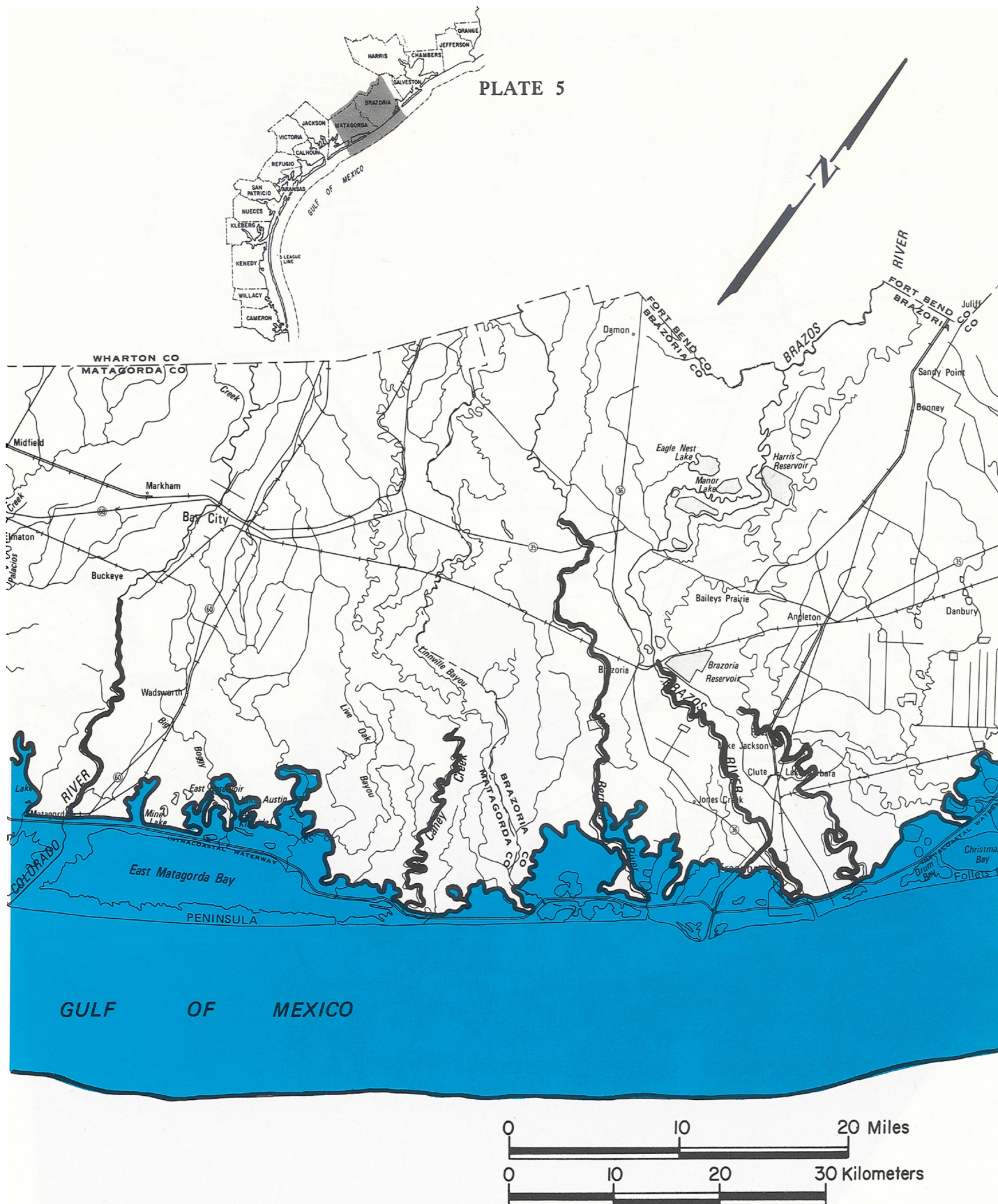


Corpus Christi-Aransas Bay Area



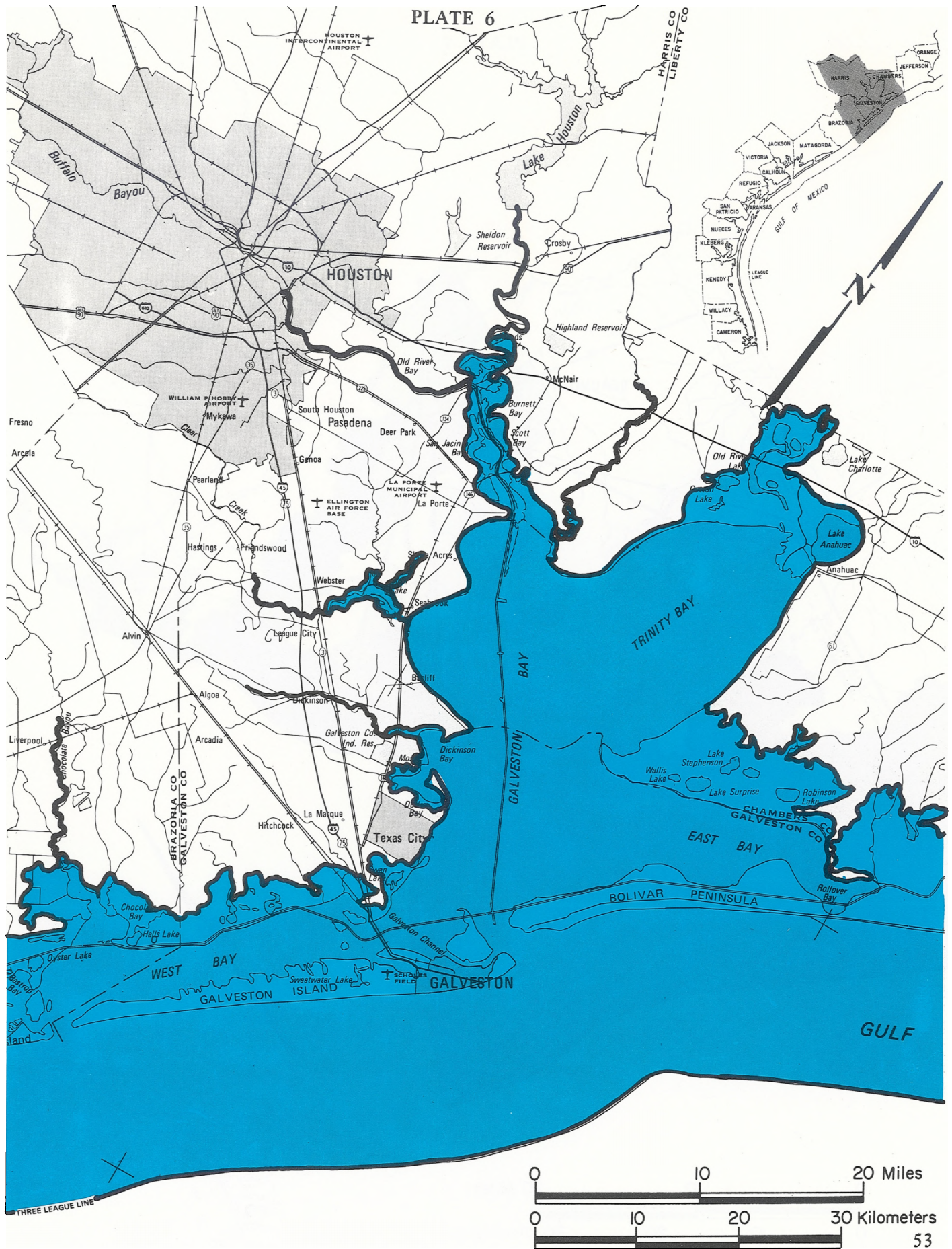
This map, titled "PLATE 4" and "Matagorda-San Antonio Bay Area", provides a detailed view of the coastal region of Texas. The map is oriented with North at the top. The Gulf of Mexico is shown in blue at the bottom, separated from the land by the "THREE LEAGUE LINE". The coastline is marked with several bays and rivers. To the west, the Guadalupe River flows into San Antonio Bay. Further east, the Lavaca River flows into Lavaca Bay. Other smaller bays include San Antonio Bay, Espiritu Santo Bay, Matagorda Bay, and Tres Palacios Bay. The map shows the following counties: De Witt, Victoria, Jackson, Lavaca, Matagorda, Wharton, and Calhoun. Major cities and towns are labeled, including Victoria, Guadalupe, Da Costa, Bloomington, Port Lavaca, Point Comfort, Port O'Connor, and Palacios. The map also shows the Gulf of Mexico, the Three League Line, and the Matagorda-San Antonio Bay Area. A scale bar at the bottom indicates distances in miles (0 to 20) and kilometers (0 to 30). A north arrow is located in the upper right corner.





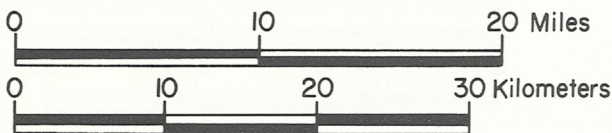
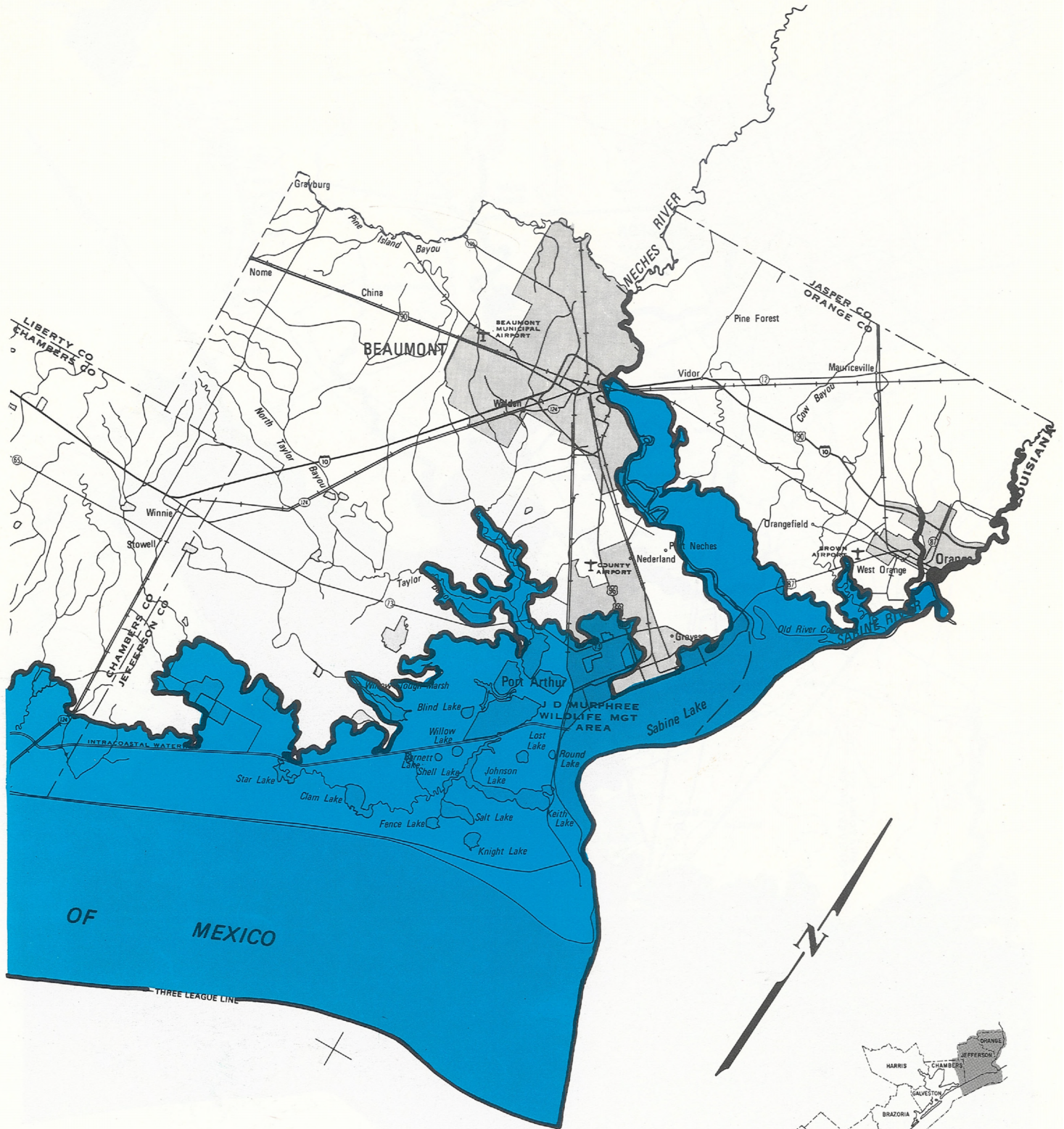
**Brazos-Colorado Delta Area**





Galveston-Trinity Bay Area





Sabine Lake Area



UNIVERSITY OF TEXAS AT AUSTIN - GEN LIBS



3006392917

0 5917 3006392917

